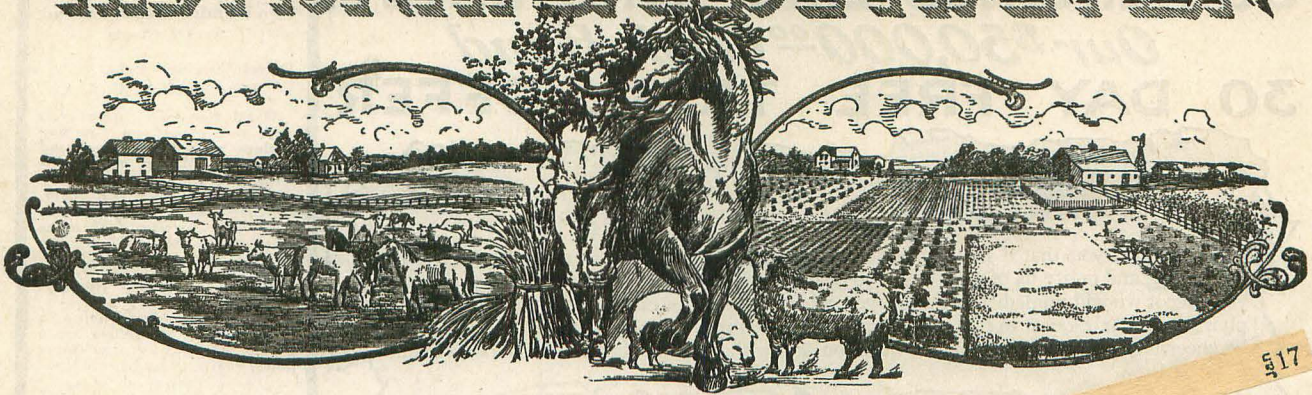


THE NORTH DAKOTA FARMER



"THE NORTH DAKOTA FARMER FOR NORTH DAKOTA FARMERS"

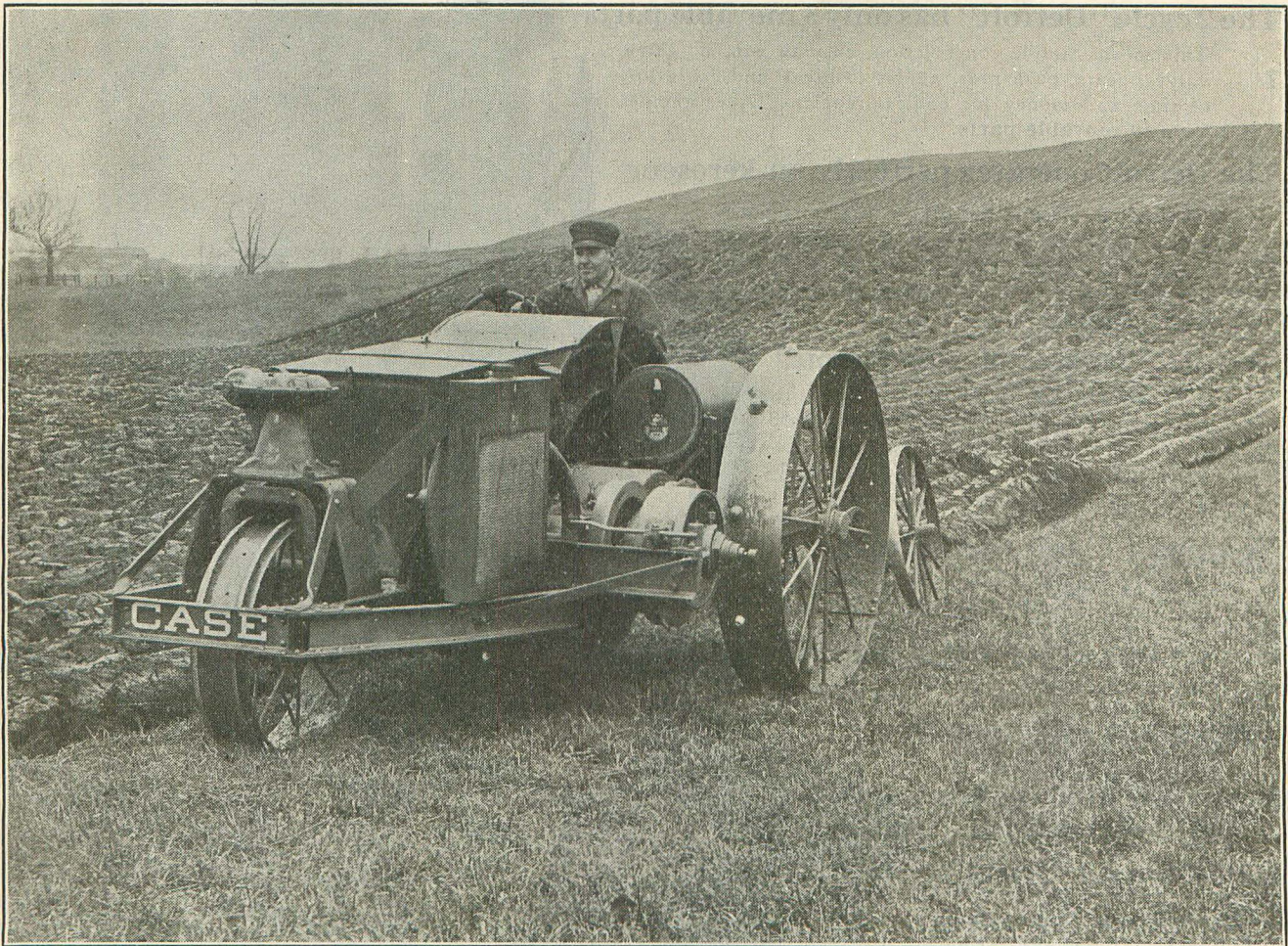
Alex Alin

517

Vol. 16, No. 10

Lisbon, North Dakota, April 15, 1915

50 Cents A Year



"Eighteen months ago the farm tractor was a comparatively large and expensive outfit and might truthfully have been said to have no place in the operation of the medium sized farm of the general type. Now, however, the type of tractor most prominent and apparently most in demand by the farmer is a small, low-priced outfit, capable of pulling from two to four plow bottoms, and with belt capacity sufficient to operate any of the machines commonly used on the average farm."

978.4

N814

Graham

WHY 40,000 "DETROIT" ENGINEERS

USE ENGINES LIKE THIS DAILY!

Our \$50,000⁰⁰ Cash Bond

30 DAY FREE TRIAL OFFER

OUR GUARANTEE

SATISFACTION ABSOLUTELY GUARANTEED OR YOUR MONEY BACK

We guarantee you that if for any reason whatever you would rather have the money than the engine, and notify us of your desire to return same within thirty days after it arrives at your depot we will immediately advise you where to ship the engine and, upon your complying with our request in this matter, every cent you may have paid us for the engine will be cheerfully repaid to you, without question and without delay, immediately upon receipt of engine.

Two Hundred Miles Beyond
Arctic Circle

Detroit Engine Works,
Detroit, Mich., U. S. A.

Gentlemen—We note you wish our report on the five engines we recently purchased from you. We are glad to inform you that we have only good things to say about them. One of them is in daily use at Gibstad, Norway, 200 miles north of the Arctic Circle.

ANEL H. HANSSENS Co.,
Arendel, Norway.

"Most up-to-date engine in these parts. Develops more power than any two-horse power engine to my knowledge."

P. J. LURK, Lodi, Miss.

5 Big Reasons WHY

Thousands of farm homes use "Detroit Engines" for sawing, threshing, spraying, pumping, churning, grinding feed, running a dynamo to light the house or barns, etc., etc.

The 2 cycle "Detroit" has only 3 movable parts

- 1 This means simple construction, easy to run, no cams, valves, gears, push rods, guides to break and cause loss of time and money for endless repairs. Other engines have **19 movable parts**.

The Detroit operates perfectly on kerosene

- 2 or gasoline, alcohol, naphtha or distillate, but most "Detroit" owners use **Kerosene**, because it's cheap, easy to get—it don't evaporate—gives more power, and it don't explode.

"With 2 Strokes of the Piston"

- 3 The Detroit 2-Cycle engine does the same work which requires 4 strokes. in the complicated 4-cycle engine. The "Detroit" creates a power impulse every 2 strokes, other engines require 4 strokes.

You don't crank the Detroit

- 4 It starts instantly, without cranking. It can be reversed while running, also the speed may be changed while running. The Detroit Fuel Injector insures perfect combustion.

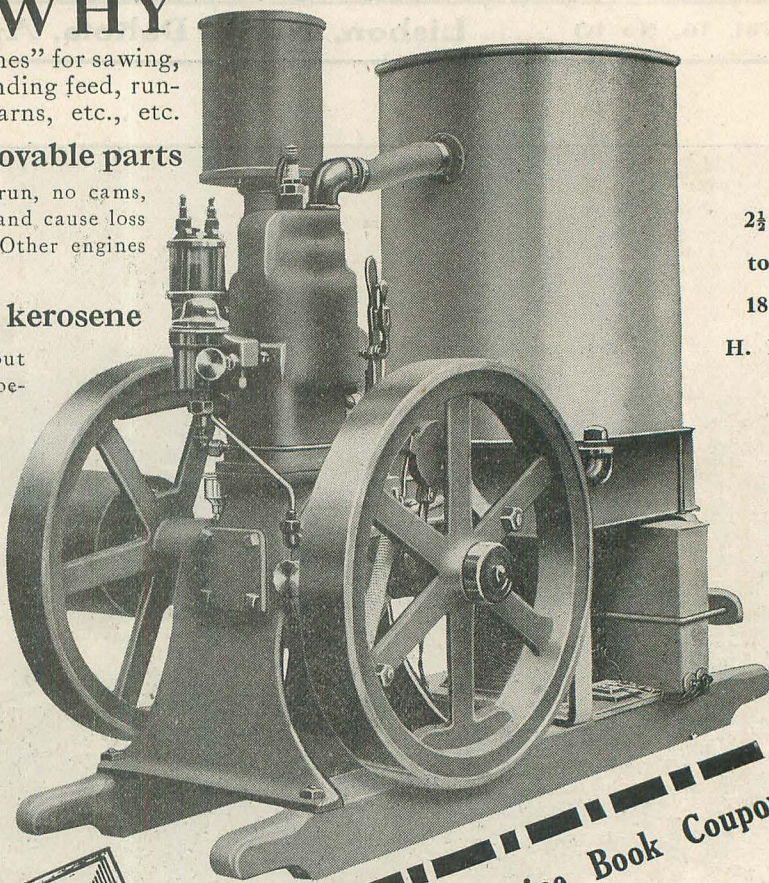
- 5 A \$50,000.00 cash bond guarantees you against loss on our 30-day free trial.

Mail Coupon TODAY

for FREE 34-page Engine Book "COMMON SENSE POWER"

This complete Engine book describes entire line of Detroit Engines—how they are made—why they are guaranteed for 10 years and also full particulars of 30-day free trial plan.

DETROIT ENGINE WORKS
66 Bellevue Avenue, Detroit, Mich.

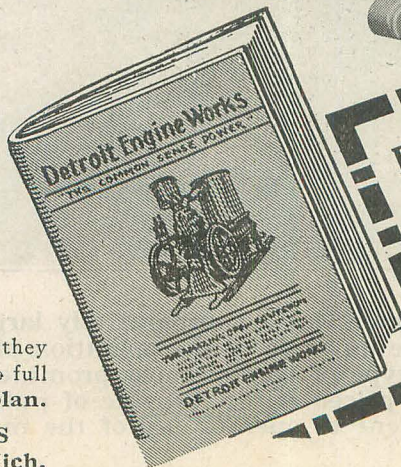


2½

to

18

H. P.



FREE 34-page Engine Book Coupon

Detroit Engine Works, 66 Bellevue Ave.
Detroit, Mich.—Send me **Absolutely Free**
New 1915 Engine Book "Common Sense Power,"
which tells all about "Detroit" Engines

Name.....
Town.....State.....
R. F. D.....
Tear off Coupon and mail
TODAY

THE NORTH DAKOTA FARMER

Vol. 16, No. 10

LISBON N. D., APRIL 15, 1915

50 Cents a Year

IN THE RUTS

By President J. H. Worst, N. D. A. C.

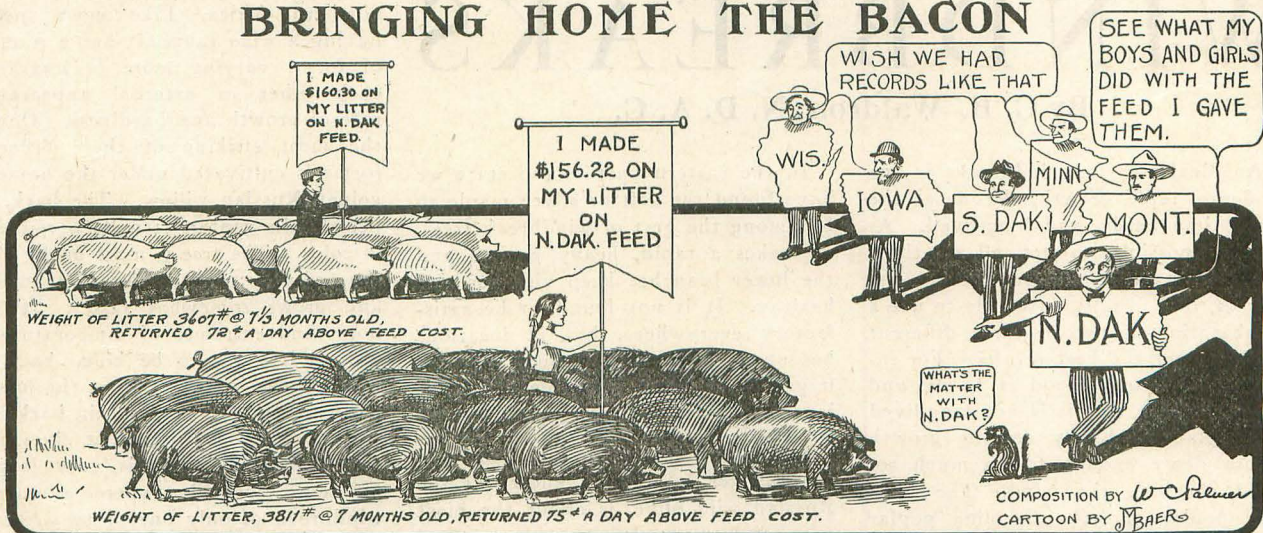
After spending the better part of a lifetime farming in a particular manner, it is difficult for many farmers to adopt new methods. This is not always because new methods are considered wrong or of minor importance, but having become accustomed to the old way, the conservatism of advancing years does not incline every farmer to take kindly to change. With

kota Agricultural College, tend to inject into the agriculture of the state a body of young men specially trained for the business of farming. Practically every student completing this course of study returns to the farm for the purpose of engaging in farm management for a livelihood. Their knowledge of soils, tillage, seed selection, animal husbandry, etc., not only

maximum yields from few acres rather than minimum yields from many acres. And this for the reason that with every passing year there are more mouths to be fed and more bodies to be clothed; hence the necessity for making each acre produce more and more to meet the demands of an ever-increasing population.

With smaller farms better tilled and better cared for, occupation will be provided for millions of additional farmers, and with every acre made to do its best every year, there will be prosperity for the farmer and food in plenty for all.

GETTING OUT OF THE RUT BY BRINGING HOME THE BACON



RESULTS OBTAINED IN N. DAK. PORK PRODUCTION CONTEST
CONDUCTED BY BETTER FARMING SECTION, N. DAK. EXP. STATION.

He who makes two pounds of pork to grow where only one grew before deserves well of mankind. For the third year the Better Farming Section of the North Dakota Experiment Station is enrolling many hundreds of boys and girls in pig-raising contests. It offers generous money prizes for the litters, farrowed not later than May 1st, that gain the most weight in the least time at the least expense. The contest will close on November 20th.—Youth's Companion.

young farmers, however, it is different. They too may become conservative when well advanced in life, but beginning now they naturally are impressed with modern ideas about farm management. The hope for a more progressive agriculture is centered, therefore, very largely, in the young men taking the longer or shorter courses in the Agricultural Colleges.

Courses of study, such as the Farm Husbandry course at the North Da-

insures their success, so far as farming can be made successful, but their influence and example should radiate thruout the communities where they reside.

And farming can be made successful. It must be made successful. The whole world depends upon the soil for food and clothing, and that too without being exploited, as is usually the case in new countries. The true science of farming consists in producing

Pioneer farming, therefore, must give way to progressive farming. The ruts must be filled up and science take the place of "rule o' thumb." The precious soil must be made even more precious by returning to it annually the equivalent of what the crop takes out of it. Where all-wheat farming has been practiced and the straw regularly burned to get rid of it, and where all the experience and farm implements spell this mode of farm-

ing, it is not an easy matter to change to diversified farming and caring for livestock. However, conditions demand it. Livestock are a necessity, not only because they insure more certain profits, but for the fertility they make, for which the depleted soil yearns.

The young men of today realize this and are studying animal husbandry with all the interest that the erstwhile student pursued the classics. They realize also that the kind of food that livestock require makes a perfect rotation of crops, the production of which distributes the farm labor more equitably thruout the year, making it possible to employ a much better grade of labor than where hoboos are relied upon during the "hurry-up" season where wheat is the exclusive crop.

And now since it has been demonstrated that North Dakota is within the corn belt, thanks for which is largely due to the efforts of school children by means of their corn-growing contests, the ascent from wheat to

livestock is not so difficult. Moreover, with livestock on the farm it will be possible to produce as many bushels of wheat as before, but on fewer acres. The profits of farming, therefore, should be practically doubled and much more certain since all the eggs will not be carried in one basket.

With silos looming up on every farm and herds of cattle and flocks of sheep and droves of pigs encountered everywhere, and yields of twenty-five bushels of wheat instead of twelve, the landscape will present a much brighter aspect, but not more so than that reflected from the face of the progressive farmer.

Ruts are a good thing—to keep out of. Let us hope that North Dakota boys will steer clear of them and engage in farming for the love of it. They can carry their brains to no better market than agriculture affords nor find a surer road to prosperity and a happy, independent and contented life than they can make for themselves on the farm.

WINDBREAKS

By C. B. Waldron, N. D. A. C.

An ideal tree for windbreaks is one of dense, rapid growth, that is at the same time hardy and long-lived. As it is impossible to get all of these qualities in perfect degree in any one species, it is usually advisable to use a combination of two or three different kinds to get the best results. For instance, the cottonwood is hardy and grows rapidly, but it is not long-lived when planted thickly and its growth is not dense enough to do much toward checking the wind. The Norway poplar and the Carolina poplar being both forms of the cottonwood, are open to the same objections. They may be planted in single rows not nearer than twelve feet to the other trees to give height to the windbreak, while the slower growing and more permanent species are getting started. For this purpose they should be set eight feet apart, removing every other tree at the end of five or six years.

The box-elder possesses many of the requisites of a typical windbreak tree, growing rapidly while young, forming a dense, heavy growth, and thriving in any climate. Its defects are that it never gets tall enough and does not live long enough. It can be used for the first few years with elm and ash, cutting it out as it crowds the other trees.

In the eastern part of the state we have found the soft or silver maple to be among the best of windbreak trees. It makes a rapid, heavy growth and the lower branches keep vigorous and healthy. It is not found to be satisfactory everywhere, but in locations having a reasonable amount of soil it grows well. In favorable surroundings it attains to great age and size.

In poor, dry soils or on alkali soil, the oleaster, commonly known as the Russian wild olive, is about the most successful tree. It never attains a large size and the top is short-lived, tho it will grow again from the roots when the old tops are cut down. Its thorny character makes it a good protection against stock. It should not be extensively planted where larger and better trees will grow, but in difficult locations it is a very valuable tree for windbreaks.

The native or green ash is ordinarily looked upon as a grove or timber tree, but it has many qualities fitting it for a place in the shelter belt. It is of fair size, makes a dense, heavy top, and will grow on almost any kind of soil. Its growth under average conditions is about one and one-half feet per year. It does not make a dense growth close to the ground, as do the willow and oleaster.

The white or American elm is pre-eminently a shade tree, but some of our best windbreaks owe their good qualities largely to this tree. It gives permanence, stability, and height, as well as character and beauty to the windbreak.

The common gray or white willow, which has been so largely planted in the west during the last fifty years, is perhaps the best single deciduous tree for the shelter belt. It makes a dense growth and attains a height of from forty to fifty feet in twenty years. It does well upon all except very dry soils or soils containing alkali. It is easily and cheaply started from cuttings and never needs replanting, as it starts readily from the stumps. If several rows of willow are planted at a distance of eight feet apart, they will furnish a liberal supply of posts and fuel for an indefinite period. The young trees are subject to attack by caterpillars and the larvae of a sawfly, but these may be killed by spraying with Paris green. The white willow is a native of the old world, where it ranges over large parts of Europe and Asia and even into northern Africa. Like most species having a wide range, it has a number of forms varying more or less from each other in external appearance, rate of growth and hardiness. One of the most striking of these different forms is cultivated under the name of golden Russian willow. The bark, especially in winter, is a deep red gold in color. The tree is more bushy than the ordinary type of the white willow and grows somewhat faster. It will not stand extremes of temperature so well and is apt to be killed back by warm spells in winter from the loss of moisture thru its rather thin bark. In spite of these drawbacks, it gives general satisfaction and is very largely planted, especially where a narrow windbreak of only one or two rows is required. It branches close to the ground and for that reason it may be planted to advantage as the north row along with ash and elm.

The western yellow or bull pine, known to botanists as *Pinus ponderosa* is doubtless the one evergreen destined to be planted largely in North Dakota for windbreaks. This tree grows wild in the southwestern part of the state, where it attains a height of from fifty to seventy feet and a diameter of two and one-half feet. It is native also over most of Montana and the entire Rocky Mountain region. In the most favored locations it attains a height of over two hundred feet and a diameter of eight feet. This tree is characterized by its remarkably dense, heavy growth. The leaves or "needles" are very thick and

firm and about six inches long, giving it a luxuriant appearance such as is ordinarily possessed by only tropical plants.

The jack pine, which grows so widely over barren lands in Wisconsin and Minnesota and on east to the Atlantic, is a rapid growing tree when young, perfectly hardy and content to grow in any kind of soil. It never makes a large tree, but is of recognized value for windbreaks, especially on light, sandy soil where few other trees will grow. The other pines which we have tried are not so reliable as the two mentioned.

PRODUCING HOME SUPPLIES J. C. McDowell

A number of years ago a North Dakota wheat farmer, whose exclusive grain growing had put him deep in debt, desired from his bank a loan of a thousand dollars. Except the horses there was no livestock—not a cow, a pig, or even a chicken—on the place. The banker, a very shrewd business man, was able to analyze the problem and to discover the cause of the farmer's financial difficulties, and he agreed to make the loan only on condition that the borrower change his system of farming.

The system outlined by the banker required that a portion of the loan should be used to purchase two cows, half a dozen pigs, and a small flock of poultry. It also provided for a fair-sized vegetable garden. Grain farming was to be continued as before. The banker figured that the livestock and the garden would, in poor as well as in good seasons, fully support the farmer's table. He figured that in poor years the farmer would be able to play even, and that in the good, and even in the average, year the

farm would produce enough to gradually wipe out the debt.

The farmer reluctantly agreed to the banker's terms, received the loan, and met the conditions. In five years he was out of debt and rated as a substantial and prosperous farmer and business man. To him farming had ceased to be a game of chance and had become a business.

TRANSPLANTING VS. THINNING VEGETABLES

R. A. McGinty, Colorado, A. C.

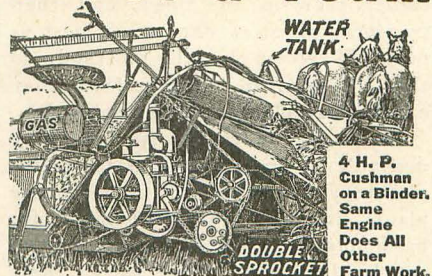
Better results are very often obtained by transplanting vegetables, than by planting them in place and thinning out later. There are several advantages in favor of transplanting.

The plants develop a better, more compact root system. They can be set at exactly the desired distance apart in the row; the soil in which the plants are to be set can be cultivated so that the plants when put out will have a start ahead of the weeds; earlier crops can be secured by starting the plants inside early in the season, and transplanting outside after danger of cold weather is past.

Sometimes the work of transplanting a crop is no more than that of thinning—take onions, for example—they can be transplanted with about the same trouble that it required for thinning, when planted in rows where

they are to mature. Better onions can be secured by the transplanting method.

Saves a Team



Cushman Binder Engines

For All Farm Work

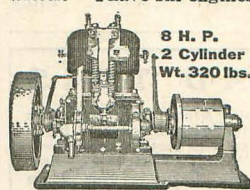
Thousands are in use in the Northwest, doing all-purpose work, that were bought for binder use. A 4 H. P. engine that will stand up on the binder will deliver the goods on any stationary job.

Cushman Engines are Throttle Governed and run easily and quietly. May be run at any speed—speed changed while running. Direct water circulating pump prevents overheating, even on all-day run. Equipped with Schebler Carburetor and Friction Clutch Pulley. Very light weight and easy to move from job to job. 4 H. P. weighs only 190 lbs.; 8 H. P. only 320 lbs. Sizes 4 to 20 H. P. Not a cheap engine but cheap in the long run.

Iver A. Madson, Wheatland, N. D., writes: "I have six engines and the Cushman is

the best. It does not jump like a heavy engine. On the binder it is a great saver of horse flesh. It will do all you claim and more too." Ask for free engine book.

CUSHMAN MOTOR WORKS
881 North 21st Street
LINCOLN, NEBRASKA



RUSTLER WHITE DENT

This is the corn that won the first prize at the Boys' Acreage Contest for the past two years. Also won first prize at both the Prize Seed and the Commercial Contest at Fargo in 1914.

Price, \$3.75 per bushel, shelled and graded. Germination test, guaranteed from 95% to 100%.

E. M. GRANLUND :: :: :: :: DE LAMERE, N. D.

FARGO FOUNDRY CO., Fargo, N. D.

The Largest Foundry Machine Shop and Boiler Shop in the Northwest. A large stock of Structural Steel and Iron always on hand. Full Line of Blacksmith Tools for Farm use. The Biggest plant in the Biggest Little City in the world.

We make a specialty of modern Fire Escapes. Best Tools and Skilled Workmen is the secret of our success. While in our city call and see us and judge for Yourselfes.

Oxy-Acetylene Welding in connection.

End of North Bridge, N. P. Ave.

Plants, like lettuce, cabbage and parsley do much better if transplanted at least once. Melon or cucumber plants, if grown in paper pots or boxes, can be started inside much earlier than in the open, and then transplanted after danger of frost is past. If grown by this method, so that the roots are not disturbed, they can be transplanted quite readily.

Hot-beds and cold-frames are very desirable for growing plants for transplanting: The hot bed to start the plants in, and the cold-frame for hardening them off. However, much can be done without the use of these structures.

FARMERS STANDING TOGETHER

Dear Editor,

In response to your request for an article on Farmers Standing Together, I send you the following that comes from the observation from the outside and the inside of several weeks spent at Bismarck during the days of the last Legislature.


While I was there, I never once got the opinion that the boys of the Legislature were a bunch of crooks. They

are the ordinary type of men, pleasant and certainly agreeable and the most of them were hard and steady workers. The vast majority were honest and fair as far as they could be. But the pressure was tremendous. Every big concern in this state had a lobby there. Did I say every big interest? I did, but I made a mistake. The biggest and the greatest and the most vital interest in North Dakota stayed at home and "let George do it." That is, the farmers with a very small exception staid at home and when bills came up that were of importance to the farmer of this state, no farmer appeared on the scene and said vote for this good or against that bad bill. Now my argument is this, if the insurance and the real estate men and the bankers and the temperance and the grain men all have lobbies at Bismarck in the Legislature, and if these various parties get what they want by having these lobbies there, it is then the only way for the farmers to get what they want—by doing the same way and establish a Farmers' Lobby at the same place.

Now some of these lobbies used plenty of beer and some used plenty of political pressure and some used persuasion, and some used the good fellowship stunt and posed as the royal hearted men with good jokes and plenty of ginger. The Farmers' Lobby can be all business. We do not have to do as the other Lobbies do. We can be fair and yet united on what we want. For my part, I am afraid that I am too poor a judge of who should constitute the Farmers' Lobby. But there ought to be three men that represent all the farmers of the state and they ought to have their instructions what to lobby for. I live about thirty miles from the Capitol and can be there about every other week. But I can not serve on the Lobby for I have my hardest work to do in the winter feeding the cattle that we run. I say this now so that no one can holler at me about wanting to run this affair. Financially and as far as time is concerned I will do my share. These Lobbyists should be strong men and well respected in their community. They should be selected with the greatest of care.

The next vital question is, what should these men lobby for and what should they ask? The farmers must be very careful not to ask for too much. We should be content with a united program of about four main things. And there again we must be careful as to what we ask. I would suggest that under no circumstance do we get into any partisan politics. For example no matter what we believe, let us avoid the temperance question, and the woman suffrage issue. These are not economic subjects. Let us confine ourselves absolutely to questions that involve the cause of the high taxes on the farms in this state and why the big International Harvester Company pays only about \$11,000 taxes, not one-tenth of what they ought to pay. Let us ask why the insurance companies of this and outside states can hold millions of dollars' worth of property in this state and pay not a cent of taxes. To offset that we must press that Constitutional Amendment thru the Legislature to put the tax on the land and not tax the farmers' improvements, such as buildings that remain on the farm. I built a barn a few years ago that cost me about a \$1000. The assessor came along and fined me because I improved my land. A real estate speculator owns some vacant land near me. Because three of us improved our places by barns and homes, this speculator sold his land much higher and reaped the profit, tho for years his taxes were much lower than ours. He was not fined. We were. I understand from good authority that the real estate men are going to put up an awful fight against this measure to exempt farm buildings from taxation at this next session. Well, as the saying is, "We will be there too." I just mentioned that one amendment as one of three or four propositions that we must unite on. And if the farmers think that this is not feasible I am willing to lay down on it and help in something else.

The next question is how to unite. I would suggest that during the summer, we agitate this among the various communities. Let the various Farmers' Clubs and Societies, whether



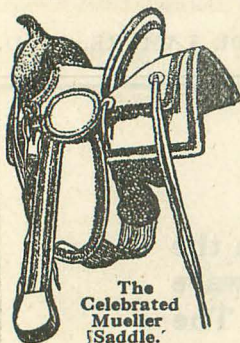
READ THIS

There must be a reason why there is such a demand for Justin's Boots. If you are going to wear boots, why not wear the best? Yours for the Best Cowboy Boots Made. Send us your address on a postal card and we will send you our catalogue, and self-measuring system.

GIVE US A TRIAL

H. J. JUSTIN & SONS
Mfgs. of Justin's Celebrated Cowboy Boots. NOCONA, TEXAS

A\$45 Saddle, \$36 Cash



Our latest Swell Fork Saddle, 14-inch swell front, 28-in. wool-lined skirt, 3-in. stirrup leather, 1/4 rig, made of best oak leather, guaranteed beef hide covered solid steel fork.

THE FRED MUELLER

Saddle & Harness Co., Dept. R, 1413-15-17-19 Larimer St. Denver, Colo. Send in your name for our catalogue now ready.

The Celebrated Mueller Saddle.

DAKOTA WELDING & MFG. COMPANY

Large Welding Plant and Machine Shop

Expert welders and machinists of ALUMINUM gear and crank cases; manifolds and housings; CAST-IRON and cracked sectional boilers; cracked or broken cylinders or water jackets; STEEL frames or any broken parts of automobiles or other machinery. We weld cracked steam boilers with our large portable plant at your home.

201 FIFTH ST. NORTH

Phone 926

FARGO, NORTH DAKOTA

they belong to a local organization or to a State Farmers' Society, talk the matter over. I am the state secretary of the Farmers' Grange and will do what I can in this society. And I know that the Grange will back this up as strong as any club. I have seen various members of the Farmers' Union of this state, which is a strong and rapidly growing organization. They too will co-operate and help push this along. In many of the counties there are a great number of Farmers' Clubs. They too are asked to help in this matter. The various Equities will also help in this co-operation. Talk over at the meetings what each club and society wants and what each thinks is the most important. Then this winter we can send out a call for a delegated Farmers' Convention to be held say at Bismarck. Let each Farmers' Club and Union and Grange and Equity and Society send two delegates. Let the Convention be very strict about the credentials and no one allowed as a delegate who is not a genuine farmer. We do not want any outside party or real estate man who lives in town and lets the other man do the sweating have any delegated representation. Then this Convention can organize and arrange for a plan of procedure. This convention can also plan on what they desire to ask for and fight against at the next session of Legislature. They can arrange for the Lobby and I think that the way it is done in the State of Washington, where the farmers pay for a stenographer who takes down all the proceedings of the session, will perhaps be the acceptable plan. We will have it in black and white who talk against us

at Bismarck and before election talk for us. Then having decided on what the farmers will unite on and what to ask for, let us plan on meeting in the middle of the Legislative session of 1917 and have a big convention and ask these legislators to put thru their promises. Great care should be taken to pledge our legislators before the election. Ask them in writing, will they vote for these propositions that we are united on. If they promise, then at the session the Farmers' Lobby and the three days' convention we can see that they fulfill these promises. This involves first a convention at Bismarck this coming winter. A plan will be adopted as to what we want. We then pledge our legislators before election. We send a Farmers' Lobby to Bismarck with the Legislators to see that they do not slip away from us. And lastly we send another delegated Convention to meet during the session and strengthen the knees of some of the weak Legislators.

Now I have the records of all the Legislators and know how they voted

For Sale Choice Big Type Poland

China Gilts, Sired by Monro's Jumbo 3rd and Giant Rupert, bred to Dignan's Chief and Miller's Big Chief for March and April farrow. I am booking orders for spring pigs to be shipped at weaning time. Pedigree furnished. Call on or Write

J. A. DIGNAN

Waverly, : : : Minn.

SEED CORN

Direct from the grower. The famous Minnesota No. 13. Germination test 95 to 100 per cent. Strong, Vigorous seed. Shelled and carefully graded. Write for sample and price. Good fodder seed corn at \$1 a bushel. I am also booking orders for Chester White boar pigs, of spring farrow, to be shipped when three months old.

M. E. HOFF

R. R. 1, Hanley Falls, Minn.

Guaranteed North Dakota Grown Shrubs for Hedges Evergreens Small Fruits

Caragana—the Siberian Pea-Tree—the best by test for Hedges in the Northwest—is a sturdy, thick-growing, upright shrub and largely used for Hedges. We have propagated a large stock of Caragana as well as other Hedge-Plants, such as Honey-suckle Dogwood, Buckthorn, Lilac, Spiraea, Russian Olive and others and offer them for spring delivery.

Evergreens—we raise them by the millions from seed collected specially in the Black Hills and Rocky Mountains. They have grown here unprotected and have been twice transplanted, insuring a strong and bounteous root-system. They are acclimated and hardy and we recommend them for ornamental and permanent plantings.

Small Fruits—Currents, Gooseberries, Raspberries and Juneberries—we also raise in large quantities. We propagate our own stock and send you extra-size plants of the best quality. We have 200 acres in Fruit Trees, Forest Trees and trees for city planting. Planting Guide and Catalog on request.

DEVILS LAKE NURSERY

DEVILS LAKE, NORTH DAKOTA

BERG'S ROPE MAKING MACHINE

Halter Ropes 2 Cents Each MADE FROM BINDER TWINE WITH THIS SIMPLE MACHINE. NO LOOSE ENDS TO RAVEL.
Makes All Kinds of Rope

Halter Rope or cow ties that cost 15 cents at the store can be home-made at a cost of two cents with an Ideal Rope Machine.

But the saving in cost is not the only advantage. Binder twine makes better rope than you can buy, because the longest and best fibre is always used in making binder twine. Twine has to be strong to hold bundles of grain and, therefore, makes a strong, light pliable rope—**Ideal Rope**. Factory-made rope has short fibres, is not so strong and snarls up when wet.

Farmers who raise grain generally have on hand a few balls of binder twine, but rarely have a supply of rope. Or, if there is rope on hand, it is frequently the wrong size or length. By having an Ideal Rope Machine you can in a few minutes make a rope just the size and length you want. No need to drop your work to get rope from town. You can use odds and ends of twine that would otherwise go to waste.

THE IDEAL ROPE MACHINE COSTS ONLY

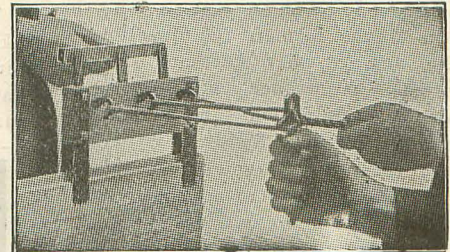
\$1.50

and will return you a profit of 200 per cent every year and save lots of time and bother. We guarantee the Ideal Rope Machine to be made of good material and to last a lifetime with ordinary use. If any purchaser of our rope machine can, with ordinary usage on a farm, wear out the machine, we will furnish another free of charge upon the return of the old machine. We could not make a fairer offer than this and you cannot afford to be without the rope machine another day.

Send \$1.50, check or postal order and we will send you the IDEAL ROPE MACHINE at once.

Agents wanted in every county. Write for **FREE!** descriptive circulars at once.

Berg Rope Making Machine Company, - Dept. NF. Madison, Minnesota



on the vital questions at Bismarck. If any Farmers' Club wants to know how their Senator voted and Legislator too, send postage to me and about the last of June I will send to that club the full information.

Let us work together in harmony. The biggest trust that we have to fight against is not the Harvester Trust or Grain Trust, but it is the Distrust that we farmers have of one another. Ask me any question that you want and I will try to answer.

Yours fraternally,
Fort Rice, N. E. Ray McKaig.

BIRDS DESTROY CERTAIN INSECTS AND WEED SEEDS AND ARE USEFUL TO THE FARMER

What A Bird Eats Largely Determines Whether It Is Beneficial or Injurious to Humanity.

How birds which destroy harmful insects and weed seeds may be useful to the farmer is described in a new Farmers' Bulletin (No. 630) of the U. S. Department of Agriculture entitled, "Some Common Birds Useful to the Farmer." The new publication has 27 pages and 23 illustrations (not colored) of the birds described. It contains much of the information included in one of the Department's former publications entitled, "Fifty Common Birds of Farm and Orchard." The Department's supply of this latter pamphlet has been exhausted and it can now only be obtained from the Superintendent of Documents, Washington, D. C., where it is sold at 15 cents a copy. It contains numerous colored illustrations of the birds mentioned. The new bulletin, "Some Common Birds Useful to the Farmer" will be furnished free to all applicants by the Department.

Whether a bird is beneficial or injurious depends almost entirely on what it eats, says the introduction to the new bulletin. In the case of species which are very abundant, or which feed to some extent on the crops of the farmer, the question of their average diet becomes one of supreme importance, and only by stomach examination can it be satisfactorily solved. Field observations are at best but fragmentary and inconclusive and lead to no final results. Birds are often accused of eating this or that product of cultivation, when an examination of the stomachs shows the accusation to be unfounded. Accordingly, the Biological Survey has conducted for some years past a systematic investigation of the food of those species which are most common about the farm and garden.

Within certain limits birds eat the kind of food that is most accessible, especially when their natural food is scarce or wanting. Thus they sometimes injure the crops of the farmer who has unintentionally destroyed their natural food in his improvement of swamp or pasture. Most of the damage done by birds and complained of by farmers and fruit growers arises from this very cause. The berry-bearing shrubs and seed-bearing weeds have been cleared away, and the birds have no recourse but to attack the cultivated grain or fruit which have replaced their natural food supply. The great majority of land birds subsist upon insects during the period of nesting and moulting, and also feed their young upon them during the first few weeks. Many species live almost entirely upon insects, taking vegetable food only when other subsistence fails. It is thus evident that in the course of a year birds destroy an incalculable number of insects, and it is difficult to overestimate the value of their services in restraining the great tide of insect life.

In winter, in the northern part of the country, insects become scarce or entirely disappear. Many species of birds, however, remaining during the cold season and are able to maintain life by eating vegetable food, as the seeds of weeds. Here again is another useful function of birds in destroying these weed seeds and thereby lessening the growth of the next year.

The new publication discusses the food habits of more than 50 birds belonging to 12 families. Many are eastern forms which are represented in the West by slightly different species or subspecies, but unless the food habits differ they are not separately described. Among the popular birds included, are the robin, bluebird, wren, brown thrasher, catbird, bobolink, oriole, crow, cuckoo, and the American sparrow.

THE ENGLISH SPARROW AS A PEST

The English sparrow among birds, like the rat among mammals, is cunning, destructive, and filthy. Its natural diet consists of seeds, but it eats a great variety of other foods.

While much of its fare consists of waste material from the streets, in autumn and winter it consumes quantities of weed seed and in summer numerous insects. The destruction of weed seed should undeniably count in the sparrow's favor. Its record as to insects in most localities is not so clear. In exceptional cases it has been found very useful as a destroyer of insect pests. For example, during a recent investigation by this bureau of birds that destroy the alfalfa weevil in northern Utah, English sparrows were feeding their nestlings largely on weevil larvae and cutworms, both of which are very injurious to alfalfa. In this case the sparrows, attracted by grain in the fields and poultry runs and by the excellent nest sites afforded by the thatched roofs of many farm buildings, had left the city and taken up their abode in the country where the weevil outbreak subsequently occurred. Unfortunately, however, farmers can



Here's the Baby Avery Tractor. Built Just Like Its Four Larger Brothers

This is the small farm size Avery Tractor. It's built just like the four larger size Avery tractors. It's the only small tractor built just like the larger size tractors put out by the same company. It's no new experiment.

This little 8-16 h. p. Avery tractor is just as strong for its power as the larger sizes. There is almost no wear out to it. It's light weight but not flimsy. It's built simple but not built cheap. It has a double opposed motor designed especially for tractor use—it's not simply a stationary gas engine or an automobile motor mounted on wheels and called a tractor. It has a strong clutch of the steam engine type—not a light automobile clutch. It has a straight spur gear transmission—not sprocket chains.

Get All the Facts About Tractor Farming

The five sizes of Avery "Light-Weight" Tractors now make tractor farming successful on any size farm—large, medium or small. Get All the Facts. Write now for the Big Avery 1915 Tractor and Plow Book, crammed full of Tractor Farming Facts. Address

Avery Company
4252 Iowa Street
Peoria, Ill.

There are more Avery Tractors and Plows in successful operation than any other make

"One Man" Outfits
5 Sizes—Fit Any Farm

This Man Makes \$200 a Week Boring Wells

John Larson of Punichy, Sask., writes: "I made in one single day with my Power Well Machine, \$83; and many weeks I have made \$200 including moves." Work during your spare time with an

Improved Powers Combined Well Boring and Drilling Machine
and make \$2,000 a year extra on a small investment. Every farm or ranch needs running water.

Bores through any kind of soil, 100 ft. in 10 hours, and drills through rock. Operated by same team that hauls it, or with gasoline engine if preferred. Simplest and fastest well-making outfit on the market. Requires no mechanic or previous experience. One man and one team operate it. Sold on easy terms. Write for catalog showing different styles and giving full information.

LISLE MFG. COMPANY,
Clarinda, Iowa



rarely expect such aid against their insect foes. Wherever this bird proves useful, however, it is entitled to protection and encouragement in proportion to its net value.

Under normal conditions its choice of insects is often unfavorable. Out of 522 English sparrow stomachs examined by the Biological Survey, 47 contained noxious insects, 50 held beneficial insects, and 31 contained insects of little or no importance. The bulletin just referred to shows conclusively that, aside from the destruction of weed seed, there is, in general, very little to be said in the sparrow's favor.

On the other hand much is to be said against the bird. It destroys fruit, as cherries, grapes, pears, and peaches. It also destroys buds and flowers of cultivated trees, shrubs, and vines. In the garden it eats seeds as they ripen, and nips off tender young vegetables, especially peas and lettuce, as they appear above ground. It damages wheat and other grains, whether newly sown, ripening, or in shocks. As a flock of 50 sparrows requires daily the equivalent of a quart of wheat, the annual loss caused by these birds thruout the country is very great. It reduces the numbers of some of our most useful and attractive native birds, as bluebirds, house wrens, purple martins, tree swallows, cliff swallows, and barn swallows, by destroying their eggs and young and by usurping nesting places. It attacks other familiar species, as the robin, wren, red-eyed vireo, catbird, and mocking bird, causing them to desert parks and shady streets of towns. Unlike our native birds whose place it usurps, it has no song, but is noisy and vituperative. It defiles buildings and ornamental trees, shrubs, and vines with its excrement and with its bulky nests.

The evidence against the English sparrow is, on the whole, overwhelming, and the present unfriendly attitude of the public towards it is reflected in our State laws. Nowhere is it included among protected birds.

Practicable methods of dealing with them include destruction of nests, shooting, trapping, and poisoning. Of these, trapping is unquestionably the best. English sparrows are good to eat, and their use as food is recommended because of their nutritive value and as a means of reducing their numbers.

DISTRIBUTION OF CULTURES FOR INOCULATING LEGUMINOUS SEEDS

In distributing cultures for inoculating leguminous seeds, the U. S. De-

partment of Agriculture has determined to adhere to last year's practice and to limit the supply that will be sent to one planter to two bottles. Each bottle contains sufficient culture to inoculate thoroly one bushel of seed. The limitation is made necessary by the probability that the funds available for the distribution of cultures will prove inadequate to furnish them in unlimited quantities.

Planters who have had no previous experience in the use of cultures and do not understand exactly what methods are necessary for successful seed inoculation should write to the department for information and for application cards. All requests for cultures must be transmitted upon these application cards. Preference will be given to advance requests, and farmers are urged to apply to the department for the culture at the earliest possible date, and at least two weeks before the probable date of sowing the seed.

Planters are also requested to plant also a small quantity of uninoculated seed on a portion of the same field with the inoculated seed. This, it is said, will materially aid the department in making observations and comparisons which will prove valuable to planters in the future.

HARROWING GRAIN

Grain may be harrowed to good advantage after it is four to six inches high, providing the soil is firm, the

harrow light and the day warm, dry and the sun shining brightly. Wheat and oats may be harrowed to good advantage just before they come up. If barley or flax are harrowed at any time after they are up, great injury to the crop will result. Wheat and oats are the small grain crops that can be harrowed to best advantage, but great injury may result if the ground is harrowed during cold, damp weather, when the dew is on the young plants when they are less than four inches high, when the soil is loose, when too heavy a harrow is used or when a heavy, dashing rain falls within twenty-four hours after the harrowing is done. The harrow is useful in the early spring in getting the weeds to start and in warming up the soil while later applications of the harrow

Porto-Panama Hats

COOL As a Drop of Dew

Hand-woven, soft, durable, comfortable. Good as the South American Panama but cooler, lighter, more dressy. Direct from maker to you, \$1.50 Postpaid. State size and send money order. Money refunded if you are not perfectly satisfied. Very stylish for ladies this year.


MARTIN LOPEZ & CO.,
P. O. Box 148, Flt San German, Porto Rico.

Reference: Bank de Economias, San German.

C-R-E-A-M

"THE FARMERS BEST CASH MARKET"
PAY DAILY—WRITE FOR PRICES

HEADQUARTERS FOR POULTRY AND VEAL
E. COBB CO.,
5 E. 3RD. ST.
ST. PAUL MINN.



You're Going To Raise Grain,—Not Gophers

We know your good sense won't let gophers "sponge on you" another year. You know how to kill gophers and how necessary their destruction is. You know they steal your profits, rob you of luxuries and spoil your land. Do you know that just before spring planting is the most effective time to kill them? They're hungry then, waiting to steal your seed and feed on the tender shoots. That's the time to protect your profits. Get ready now!

KILL-EM-QUICK

It Kills Gophers. It's the only way,—you can't trap or shoot enough to make any impression on the increase. But **Kill-Em-Quick Gopher Poison** will clean them out in a day. Its odor attracts them. The sweet taste suits them. The tiniest particle eaten kills instantly. It's the one **absolutely sure** way to destroy gophers, prairie dogs, squirrels, mice, etc.

Kill-Em-Quick is the most economical to use. It's the safest. There's no danger in preparing.—simply soak the grain over night, drain in the morning, pour the box of **Kill-Em-Quick Powder** in and stir thoroughly. Then drop a few kernels of grain into their holes. Next day every gopher in your field will be dead. Or, if you want to collect a bounty drop the grain four or five feet from the holes. No gopher will ever travel four feet after eating **Kill-Em-Quick**.

We unreservedly guarantee that Mickelson's **Kill-Em-Quick** is not only the cheapest gopher poison you or any other man can use, but the **most effective you can use at any price.** **Kill-Em-Quick** comes in three sizes: 50c, 75c and \$1.25; enough for 40 acres, 80 and 160 acres; enough to kill 1,000, 2,000 and 4,000 gophers. Backed by a cash guarantee. Full satisfaction or money back. Get it from your druggist. If he can't supply you, we send prepaid on receipt of the price. Send for FREE gopher book.

MICKELSON-SHAPIRO CO.,

26 N. 3d St., Minneapolis, Minn.



will, if used judiciously, go a long way toward exterminating annual weeds. Corn can be harrowed when dry and on a warm bright day. A light harrow should be used and the corn land should be reasonably compact. It can be compacted by means of a subsurface packer or a corrugated iron roller before planting. The weeder is an implement that can be used to good advantage on land that is level and reasonably free from trash. It can be used until the grain is six to ten inches high. The weeder, however, is too light to destroy such weeds as pigeon grass, French weed and mustard, being much more efficient with them than the peg-tooth harrow.

FARMERS WANTED

Uncle Sam is looking for several hundred practical farmers to take up homes on the irrigation projects he has been building in the West. The land is free, but the law requires settlers to pay their share of building the irrigation system, and for this reason a moderate capital is necessary. A practical farmer with from \$1,500 to \$3,000 should have no trouble in acquiring one of these farms and putting it in successful cultivation.

Under the new Extension Act the settlers are allowed twenty years in which to pay for their water right, and no interest is required on deferred payments. Details concerning opportunities and terms will be furnished upon request by the Statistician of the Reclamation Service, Washington, D. C.

CORN LAND FOR WHEAT

On the North Dakota demonstration farms wheat after corn has averaged 20 bushels per acre, while continuous wheat gave 12½ bushels. This is the result of six years work. At the North Dakota Experiment Station a fifteen-year investigation gives a yield of 19½ bushels of wheat after corn, while wheat after wheat gave 11½ bushels.

SCREENINGS

Screenings are sometimes considered as of no value. This is a mistake. The screenings are made up of seeds, the same as the grain, and these seeds contain the same food elements as the grains. To test the value of screenings an experiment was carried out by two students, Amos Ewen and Ephraim Westlund, at the North Dakota Agricultural College. They fed three pens of sheep. The first one was fed oats and bran, the second pigeon grass seed and the third screenings. The feeding period covered ten weeks.

It was, to some, a little surprising to find that the sheep getting the oats and bran made the smallest gains. The screenings lot made 34 pounds more gain and used up only 12 pounds more screenings than lot one ate of the oats and bran. The lot that were fed the pigeon grass seed made 16 pounds more gain than the oat and bran lot and used up 12 pounds more of the pigeon grass seed than lot one ate of the bran and oats. This experiment brings out the value of the screenings that so often is left in the grain and nothing received for it.

The average dockage of wheat in North Dakota in 1910 and 1911 was two and one-fifth pounds per bushel. If this is the same for this year it will amount to more than 90,000 tons or enough to feed over a million sheep thru a fattening period of thirteen weeks.

Similar results have been secured in Montana in feeding screenings to sheep.

The stubble fields furnish a lot of feed for sheep. Many farmers have brought lambs from Montana and are feeding them on the stubble during nice weather and will later fatten them. The fattening food will largely consist of corn and screenings.

Those who keep sheep report a larger percentage of income for the sheep than from the other kinds of stock kept. The sheep can also be made to do a good service on the farm by eating up weeds and thus helping to keep the farm clean.

TIMOTHY IMPROVES SOIL

The growing of timothy has been found to improve the land for wheat. The average of three trials at the North Dakota Experiment Station shows that the first crop of wheat after timothy was increased one and four-fifths bushels, the second crop eight and nine-tenths bushels, third crop was increased six and one-sixth bushels and the fourth year the increase was six and three-fourths bushels. Taking an average of all the

timothy plots the increase in yield was more than one-third better than wheat after wheat.

ALFALFA FOR SEED OR HAY

At the Dickinson North Dakota Substation a one-acre field of alfalfa sown in six-inch drills has in five years averaged two tons of hay and thirty-five pounds of seed a year, while a field sown in thirty-inch rows in the same five years averaged one ton of hay and eighty-five pounds of seed. The thinner seeding has favored seed production.

MY FAVORITE KING

By William Edward Park, Chatham
(Canada) Daily News

When knights were bold and ladies fair,
and all that medieval junk,
And when for common folks like us
the job of living was most punk,
When all the world was full of strife,
and dungeons and that sort of thing,

The cuss who most extinguished life
was usually crowned king.

But we in better days were born,
when men in peace together live
And kings are made but to adorn a
job that common people give
And earn their living like the rest at
banquets and that sort of thing—
Oh, nowadays it hardly pays to hold
their lofty job of king.

We Want Men

In every county in Minnesota, North and South Dakota to represent us. Our stock is grown for our North-western conditions and only hardy stock will be sent out. Every planter wants trees and plants that will live, and we have them. Write for information and terms. Outfit free.

PIONEER NURSERY CO.,

New Ulm, :: :: Minnesota.



NORTH
DAKOTA
GROWN

SEED CORN

KILN DRIED,
SELECTED
AND TESTED

The past season has been one banner year in the production of high grade North Dakota Grown Seed Corn, stocks show almost perfect germination tests and you should take advantage of present low values by ordering at once.

Alfalfa, Clover, Timothy

and grass seeds are reasonable in price this year, and our stock is of the very highest test and will prove their worth when harvest time comes. Your order should not be delayed if you want good seed. Send today for our 1915 catalog, free.

Fargo Seed House

FARGO

Dealers in strictly
high-grade seeds.

NORTH DAKOTA

But there's another sort of king who still the crown of battle wears—

D. Ward's his name and he has fought the fight for better thoroughfares. That can be built without expense.

He makes the very rafters ring With pleadings and with arguments—and that is why his praise I sing.

For heaven knows we need good roads—good roads to let the farmer pass

To market with his wheat and corn and sugar beets and garden sass,

And bring us closer to the farm and bring them closer to the town

And D. Ward King, for what he's done, has pretty fairly earned a crown.

Among Our Advertisers

THERE WILL BE A HEAVY DEFICIT OF THE WORLD'S NORMAL CROP

A grain expert who has been watching the grain markets and the world's grain fields for a number of years, says:

"There is at the present time about two billion bushels of wheat, the production of the countries at war, tied up. This is about one-half the world's total production of wheat, which is four billion bushels. One writer argues that, granting that the warring nations produce a one-half crop in the coming year, a deficit of one billion bushels will still be shown. The three countries upon which the filling of this deficit of one billion bushels will rest are the United States, Canada, and Argentina. The combined output of these three countries is only 1,249,000,000; their exportable surplus would of course, be much less, so it can easily be seen that the question is not one to be easily solved, and it behooves all the above countries to increase their respective productions as much as they possibly can.

"During the three years following the declaration of peace the farmers of all neutral wheat-producing countries will have ample opportunity to market their wheat at good prices, and it may safely be assumed that the demand will be heavy. Canada has an unusual opportunity in that she has the natural environment for wheat production; she is under the protection of the British flag, and she will not be molested upon the water to any great extent; she can increase her acreage and greatly enhance her production. In other words, she can become a far greater wheat-producing country than she is at the present time."

If the summing-up, as made by this expert, be correct, is there not the very best reason for the continued effort that is being made by the Government of the Dominion of Canada to secure settlers on the productive vacant lands of the country. Not only are these lands capable of producing high-class wheat in large quantities, but cattle, pigs, sheep and horses also do well. The climate is admirably suited.

FOREIGN ORDERS NO ATTRACTION

The F. Mayer Boot & Shoe Co. of Milwaukee, has, within the past few months, refused consideration of orders from several European nations aggregating over 6,000,000 pairs of shoes.

This immense volume of foreign business was turned down by the Mayer company because of unwillingness to see the great amount of leather represented in such a quantity of shoes, go out of the country at the expense of the American consumer. To fill an order of this magnitude would require the hides of 450,000 cattle for the uppers alone and 240,000 more hides would be needed to supply the sole leather, making a total of 690,000 full grown cattle to fill the bill.

Figuring each shoe to occupy a space of twelve inches, the six million pairs of shoes, if placed in single file, would stretch out over the country for a distance of about 2272 miles or from Milwaukee to San Francisco.

Withdrawal from the domestic market of great quantities of leather which would, under normal conditions, be consumed in this country, naturally decreases the available supply and, of course, increases the cost of shoes to the American buyer.

This protective action on the part of this big Milwaukee manufacturer is a very concrete and practical application of the "America First" idea.

ARE THESE REALLY HARD TIMES?

An Encouraging Example of Confidence from Mishawaka, Indiana, That Sounds Like Prosperity.

Ask any man nowadays "How is business?" and his reply is likely to be, "Well, everybody says it's bad, but it seems to be pretty brisk with us. I know I am busy."

America is full of examples of increasing prosperity. Especially those firms that cater to the needs of the farmer are working full or extra time.

Take the case of the Mishawaka Woolen Mfg. Company of Mishawaka, Ind. This company manufactures the famous "Ball-Band" Rubber Footwear, worn by over eight and one-half million workers.

For many years they have manufactured rubber boots, shoes and arctics of all descriptions—woolen socks, knit boots, etc., all marked with a Red Ball Trade Mark.

They have never made light rubbers. Now they are about to make them. From dealers and consumers all over the country has come the cry, "Give us light rubbers with the little red ball on them."

So the "Ball-Band" line is to include light rubbers. In order that deliveries can begin January, 1916, work on an enormous new plant has begun and will be pushed with all possible speed. This means the employment of at least 1,000 more persons when the new buildings are completed, or a total of 3,600 employed for this company.

Hundreds of new homes will have to be built to take care of the new workers. The building of these homes will offer a further market for labor and material.

The new buildings and equipment will cost in excess of half a million dollars. Over ten thousand pairs of the new lightweight rubbers will be produced daily, these to be marketed direct by salesmen to over 50,000 dealers.

This great increase in business in the face of competition and supposedly depressed times speaks well for the stability of the Mishawaka Woolen Manufacturing Company and its celebrated products.

It is a typical example of the courage, faith and ability of the American Business Man.

EXPANSION

The Pioneer Nursery has changed to Pioneer Nursery Company, Wm. Pfaender, Jr., Sec.-Treas., with a capital stock of \$50,000. They have 80 acres devoted exclusively at present to growing hardy stock for the Northwest. They report business is exceptionally good this spring.

POULTRY NOTE

There is a chicken law in Indiana, according to State Attorney Jeffries, which claims that when chickens wander away from their owner's premises and take to tearing up the neighbor's garden, they become wild birds, and the aforesaid neighbor may shoot them.

North Dakota Farmer

Entered as second class matter in the postoffice at
Lisbon, North Dakota

PUBLISHED EVERY MONTH

W. G. CROCKER : : **PUBLISHER**
Lisbon, N. D.

E. F. Ladd, Editor FARGO, N. D.

BUSINESS MANAGEMENT, LISBON, N. D.

ASSOCIATED EDITORS

PROF. J. H. SHEPPERD, State Farm Notes.

PROF. W. B. RICHARDS, Livestock.

PROF. C. B. WALDRON, Fruits, Forestry,
Insect pests.

Remittances should be made by Drafts, Post-
office Order or Express Order.

Address all business correspondence to the
Lisbon office.

Vol. 16 **APRIL, 1915** **No. 10**

Have you tried the everbearing strawberries? That variety is fast winning its way.

You can not make the man who owns a silo believe in "mining" for corn fodder beneath snow drifts.

This sounds good: "Your class of advertising comes near to the ideal of the advertising business."

Plant more grain this year, if you feel like making the venture, but do not sacrifice a single animal on the farm.

Now that wild hay is rapidly disappearing the silo must come to the aid of the farmer until tame grasses have become well established.

Is a man justified in using violence when restraining his wife from making garden and taking care of the stock while he is loafing about town?

Regardless of the time when plowing is done, whether spring or fall, the furrow slice should be firmed down in close contact with the subsoil. Whether or not it is so firmed down is expressed largely in the yield of crop at harvest time.

Arbor Day is approaching. If you will not plant trees for their beauty, plant them for their climatic value; if not for that purpose, plant them for their economic value. Have you ever calculated the worth to a farm of a grove of trees in which the birds raise their young?

We are making progress. It is no longer necessary to deliver lectures, run special trains and send out bulle-

tins on the necessity of treating grain with formaldehyde to kill the smut spores. Farmers have learned this lesson by heart.

A ton of butter removes only 64 cents worth of fertility from the soil while a ton of wheat removes nine dollars' worth of fertility. For the conservation of a farmer's capital—which the fertility in his soil is—butter production beats wheat-raising by a thousand miles.

In another column Ray McKaig hits the nail on the head when he states that "the biggest trust that we have to fight is not the Harvester Trust or the Grain Trust, but the distrust of the farmers." Possibly there is reason for their distrust after dealing with many a sleek, self-interested, fawning "champion (?) of the down-trodden farmer."

A good many among the more progressive farmers of this commonwealth are becoming concerned as to proper methods of getting rid of weeds. Those having had successful experience with the destruction of such weeds as Canada and sow thistle, quack grass, wild oats, etc., could render the country no better service than to keep right on with the good work, and also explain thru the columns of the North Dakota Farmer how they do it.

There is entirely too much law made for the good of the country. The people responsible for the country's prosperity are becoming heartily sick of so much law-making. The average legislature is made up largely of young fellows of limited experience and little personal responsibility, but who are over-anxious to make some sort of record by securing the passage of one or several bills. The character of the bills they introduce is of little consequence, just so they are bills and some of them are passed. Think of a good thousand "Thou shalt nots" introduced every two years! No wonder the people are anxious to limit the number of members composing the house and senate and to have a session only every fourth year, and they should persist until they accomplish their purpose.

The fact that wheat commands an abnormally high price, and that an unlimited demand for bread is apparent in Europe, on account of the war that is raging there, is no good reason for putting in more acres than can be thoroly prepared for the seed. Thoro cultivation is about the only insurance the farmer can rely upon should

the season prove unfavorable; for it is a demonstrated fact that the fields that suffer first and most are the fields that were put in in a slipshod manner. In fact it pays immensely to prepare a good seed bed and give such additional cultivation as may seem necessary when the season is most favorable. The saying, "Good farming, good crop; poor farming, poor crop," comes very close to the truth.

The young man of today desires an education. He wants his education to relate to things he will have to do in order to make a living, and to provide a surplus in addition to support him and his wife during their declining years. He is entitled to as much. He is not looking for something "soft," nor does he desire to become a parasite because he has an education that does not prepare him for some useful occupation. The old feeling that education and manual work are incompatible is the relic of by-gone years. The best work in the world is intelligent work, and intelligence is the result of education. And since labor creates the wealth that supports our educational institutions, those who are to perform the labor should reap the first fruits of our educational system.

FREE SUBSCRIPTION PUZZLE

A two-year subscription will be given for the names of the eleven advertisements in this issue containing the following: It would be impossible—to obtain your choice of—catalog showing different styles—of blacksmith tools for farm use—if any purchaser of our—extra sized plants of the best quality—has a double opposed motor. We guarantee that for any reason whatever—this most remarkable winter egg-laying strain—is the corn that won—full satisfaction or money back.

Simply name the advertisers in their order and mail to the North Dakota Farmer before the 5th of May, at the same time stating why you prize the North Dakota Farmer and how this paper may be made more helpful.

Sworn Statement of NORTH DAKOTA FARMER Made Under New Postal Law

Editor—E. F. Ladd, Fargo, N. D.

Publisher—W. G. Crocker, Lisbon, N. D.

Owners—W. G. Crocker, Lisbon, N. D. and E. F. Ladd, Fargo, N. D.

There are no bonds, mortgages or other securities outstanding against the NORTH DAKOTA FARMER.

NORTH DAKOTA FARMER,
By **W. G. Crocker,**
Publisher.

Sworn to and subscribed before me, this 3rd day of April, 1915.

(Seal) **Harley S. Grover**

My commission expires **Dec. 11, 1919.**

Pure Food Advertisers

The products advertised below are in compliance with the pure food law of North Dakota and of the highest grade
ASK YOUR GROCER FOR THEM.



**"Ah-h-
Great!"**

The world-old ambition of woman is to please man. No other line of food-products is so certain to please him as

BLUE BIRD Canned Goods

This brand of EXTRA-standard foods is good enough for anybody—and the cost is low enough for everybody.

The
BLUE
BIRD
line
on a
dealer's
shelves
adds
class
to his
store



**STONE - ORDEAN -
WELLS COMPANY**
DULUTH and Branches

Our Candies Are Pure

Chaney-Everhart Co.
Fargo, N. Dak.

"BUY"

"EAT"

HOME BRAND

Pure Food Products

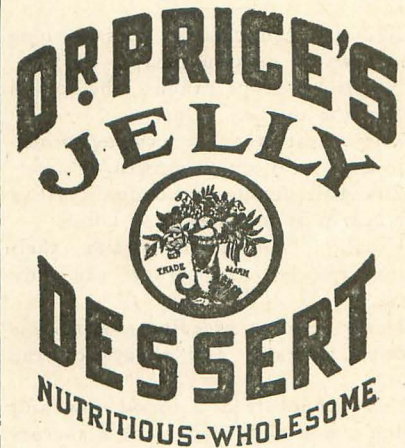
"ECONOMY" "SATISFACTION"

Griggs, Cooper & Co.

MANUFACTURING
WHOLESALE
GROCERS,

ST. PAUL, MINN.

Main Offices:
CORNER THIRD AND BROADWAY



One package, 10 cents, makes one pint of wholesome Fruit Jelly. All flavors from true fruits.

MONARCH BRAND



FOOD PRODUCTS

A GUARANTY OF PURITY. A WELCOME GUEST at every table where the HOUSEWIFE demands the BEST. THE MONARCH LABEL insures QUALITY in Coffee, Catsup, Pickles, Maple Syrup, Canned Goods or any article bearing the MONARCH BRAND of REID MURDOCH & CO CHICAGO.

Eat North Dakota Sweet Corn

Sanitary

PACKED BY
ONLY
FACTORY OF
ITS KIND IN
THE STATE.
SEALED IN
SANITARY
CANS AT
OUR
MODERN
THREE-
STORY
FACTORY



Delicious

NORTH
DAKOTA
CORN
EXCELS IN
SWEETNESS.

ASK YOUR
GROCER
FOR OUR
BRAND.

WRITE FOR
PARTICU-
LARS

Sheyenne Valley Canning Co.

- Lisbon, N. D.

Livestock Department

FARM AND STOCK NOTES

N. J. Shepherd

Keeping comfortable goes a long way towards making cheaper pork.

Nearly all crops exhaust the soil in proportion to their value.

The surest way of securing profitable hogs is by quick growth.

Fine hair denotes good quality in a pig nearly as much as in a horse.

Usually farmers can raise their teams cheaper than they can buy them.

Never select a breeding sow that is nervous, irritable and always on the go.

You cannot feed a brood sow and fatten a hog alike and make a success of both.

With all classes of stock breeding too early is quite incompatible with hardness of constitution and lasting qualities.

On the majority of farms if horse breeding is not made remunerative it is for lack of judicious management.

A restless hbg or one having large bones and large coarse ears will need much more feed to sustain the vital forces.

The man who takes advantage of opportunities to prevent disaster in whatever shape it may come will nearly always be successful.

A docile contented animal is nearly always a good feeder as little of its feed is spent in nervous excitement or accompanying restless action.

A farmer to succeed best must be a good salesman and know how to sell every product of his farm to the best advantage.

There may be such a thing as bad luck in the dairy business, but it is a peculiar co-incidence that it always follows bad management.

To a very considerable extent the law of supply and demand determines the price of commodities, but the cost of production determines their profitability.

Healthy animals require no medicine; condition in them may be established and maintained by intelligently applied alterations in the quantity and quality of their food and labor.

Improvement is seldom found in a cross and if found is only with and after great care and guarding and perpetuating such a cross until it finally becomes a distinct breed of stock.

Sheep to fatten the most rapidly and on the least grain must be kept quiet and not be allowed to run over so much ground as to run the flesh off of them.

There is no reason why a large sheep should not bear just as dense, long and heavy a fleece in proportion to its size as the smaller one. The larger sheep in reality should bear the heavier fleece as there is more surface in which the wool can grow.

As a rule it is much better to plant out young trees, not over two years old, than older larger ones. On these younger trees better roots can be gotten and they are not so much injured by being transplanted and consequently grow more rapidly and soon surpass the larger trees.

In selecting a horse for any purpose other than draft, a very wide breast should be avoided, for in most cases a horse with this formation will paddle when he trots. For active service the breast should not be over medium width and the fore-legs should be reasonably close together.

It is the wisest plan always to begin a right and to thoroly prepare the ground before putting in the crop. Half the work of caring for the crops is completed when the ground is put in a thoroly good condition before the seed is sown; but if this is neglected the labor of cultivation is almost doubled.

BREEDING CIRCUIT REPORT

The North Dakota Holstein Breeding Circuit of New Salem, N. D. is written up in Bulletin No. 109, North Dakota Experiment Station. The results of the first four years are given. This includes the production of each cow in each herd. The annual production of each cow is determined by weighing the milk from each milking and by weighing the feed fed. A history of the circuit and its organization is included.

SCOURING WOOL LOSSES

In trials in scouring wool at the North Dakota Experiment Station it was found that the average loss was sixty-one and one-half per cent. The wool was from sheep raised on the prairie in the western part of the state.

CLASSIFIED ADS.

One Cent a Word

Small advertisements will be classified under appropriate headings at the low price of one cent a word for each insertion. Cash must accompany all orders. Each initial or number must count as one word. TRY IT HERE.

LIVE STOCK

CALVES OF QUALITY

Holstien, Guernsey, Jersey or Shorthorn. Either bulls or heifers. Crated to express at \$12.50 to \$20 each. High grades. Get information and express rates. State your preference.

PAUL E. JOHNSON

Station F, South St. Paul, Minn.

FOR SALE: Chester White Gilts Bred to Dakota's Pride, a son of Sweepstakes No. 28006, the hog that weighed 1260 pounds. Also Pigs at weaning time.

THE PRATT FARM

Geo. A. Pratt, Prop. : Cooperstown, N. D.

Minnesota Highest A. R. Record Guernseys

Twenty cows average 514 pounds fat,

equal to over 615 pounds of butter

World's Greatest Herd of A. R. Red Polls

Whole Herd averages 422 pounds

fat, equals to 506 pounds of butter

Bulls for Breeding Clubs to Suit All Pocketbooks

Jean Du Luth Farms, Inc., Duluth, Minn.

Geo. P. Grout, Managing Owner

For Sale. Registered Holstein Bull 11 months old, Three-fourths white. Of Pontiac Korndyke breeding. Also a few bull calves of same breeding. John Walsh, Northfield, Minn. R. 4.

DURROC JERSEY GILTS AND WHITE HOLLAND TOMS

Am offering only my choicest gilts bred to Crimmon Model 4th for March, April and May farrow. Pedigrees furnished. Roy W. Jacobs, Wadena, Minn.

Red Polled. If you are looking for choice bulls all ages, write, Howard H. Capener, Erie, N. D.

FOR SALE: Duroc-Jersey Boars including Herd Boar; Shropshire Ram Lambs; Barred Plymouth Rock, and Single and Rose Comb R. I. Red Cockerels, Dark Muscovy Ducks.

E. W. SMITH. : : BUFFALO, N. D.

Pure bred Percheron Horses and Shorthorn Cattle Stock for sale. Nels Knutson & Sons, R. 1, Fullerton, N. D.

THE PLEASANT GROVE FARM at Holmes, Grand Forks County, sells registered Shropshire and Oxford Rams and Ewes; also Polled Durham Bull Calves. R. E. Strutz, Bismarck, North Dakota.

205 DIFFERENT FOREIGN STAMPS FREE

If you remit 25 cents for six month's subscription to "Mekeel's Stamp Weekly," 530 East Boston, Mass. If preferred we will send 101 different United States.

FOR SALE. Two Holstein Bull Calves, nicely marked and fine animals; Ages three and four months. Sired by my herd Bull Sir Albino Beets Segis No. 116611. Wm. Pewe, McHenry, North Dakota., R. R. 1.

Meadowlawn Farm. The largest breeders in North Dakota. Percheron Horses, Shorthorn Cattle, and Berkshire Hogs. Where quality counts. Address: A. H. WHITE, - - - Kramer, N. D.

For Large Yorkshires of either sex and bred gilts, address L. A. Knoke, Badger Den Stock Farm, Willow City, N. D.

Choice Poland China Hogs always on hand. Bred Gilts all sold. Register now for spring pigs, either sex; prices right. Thos. Forbes, Petersburg, N. D.

ENVILLA STOCK FARM

Envilla Stock Farm, Cogswell, N. D. will quote you special prices on Angus Cattle, Shetland Ponies, Duroc Jersey Hogs, Wolf Hounds, Collies, Rat Dogs and other breeds, Angora Cats. All varieties of chickens; turkeys, geese, ducks, guineas, pheasants, rabbits, ferrets. Pets. Live Foxes, Skunks, Mink and Badgers.

Bixby's Red Polls

of A. R. Breeding

My herd bull J. D. Merryweather No. 24396 is from 1400-pound cows and is getting the size in my herd. His dam is a full sister to the World's Champion Two-Year-Old heifer. His first three dams average close to 400 pounds butterfat in one year.

J. S. BIXBY, : : LISBON, N. DAK.

The losses in scouring wool usually run from 55 to 70 per cent.

North Dakota Farmer,

Lisbon, N. D.

Gentlemen:

I know that you will be interested in knowing that the trade in Percheron horses shows an appreciable increase in spite of war, foot and mouth disease, and drop in prices on cloven hoofed animals, which depressed trade in general.

During Feb. 1914 the Percheron Society of America cleared 1101 transfers; for Feb. 1915, 1192 transfers.

About eight or nine thousand American bred Percherons are now annually produced and recorded. The registration of pure bred draft horses of the other draft breeds,—Clydesdale, Shire, Belgian, French Draft and Suffolk—amounts to approximately four thousand animals annually, so that only twelve to thirteen thousand pure bred draft American bred horses are being produced annually, and recorded. As the sex runs about half and half, this means that but six thousand pure bred draft stallions of all breeds (approximately) are now being produced annually. This is a small number in proportion to the twenty-three million horses owned in the United States, and it is inevitable that prices must rise on good pure bred draft sires of any breed.

The marvelous gain in exports of horses is the most marked development of the general trade. Total exports of horses from the United States to other countries (per data supplied us by the Bureau of Foreign Commerce U. S. A.) amounted to but one million two hundred eighty-six thousand, three hundred and sixty-nine dollars (\$1,286,369.00) for the last five months of 1913. During the last five months of 1914 exports totaled fifteen million, four hundred thirty-nine thousand, six hundred and four dollars (\$15,439,604.00), a gain of more than fourteen million dollars. Tabulated our exports by months for the last five months of 1914 are:

Month	No. Head Horses	Value
August	804	\$96,706
September	7146	999,267
October	12091	1,918,433
November	28071	5,034,353
December	30687	7,390,845
	78799	\$15,439,604

There is every indication that the most astounding rate of increase in value of horses exported will continue. Your readers will be interested in this.

Sincerely yours,

WAYNE DINSMORE,
Secretary.

THE SMALL TRACTOR IN FARM PRACTICE

A. P. Yerkes

To attempt to define the status of a machine which is undergoing so rapid a process of development as the farm tractor is difficult, as its status changes with each improvement or modification. Eighteen months ago the farm tractor was a comparatively large and expensive outfit and might truthfully have been said to have no place in the operation of the medium sized farm of the general type. Now, however, the type of tractor most prominent and apparently most in demand by the farmer is a small, low-priced outfit, capable of pulling from two to four plow bottoms, and with belt capacity sufficient to operate any of the machines commonly used on the average farm.

These small tractors are of simpler construction than the large ones. Most of them have only one drive wheel and usually only one speed forward and one reverse, thus eliminating considerable gearing, including the differential

DUROC JERSEYS Glits out of such sows as Golden Model Queen 6th, Model Beauty and other sows as well bred as could be bought at the sales last winter. Write H. N. HOYME, Jasper, Minn.

HOLSTEIN Cows, Heifers and Young Bulls. All ages. Write Envilla Stock Farm, Cogswell, North Dakota.

MAPLE LODGE LARGE YORKSHIRES

March and May pigs, \$10 up, also a few fall pigs, stock of good type and strong bone. Bourbon Red Turkeys, \$2.50, and up. Partridge Wyandottes, (winter layers) stock and eggs, \$1.50. Edward Klebaum, Egeland, N. D.

\$138 a Cow per Year



is a late average of a Washington State Jersey herd. Many

Jersey

Cows have records of 500 to 1000 pounds of butter annually—a telling lesson to people who are struggling along with \$20 to \$30 cows. Investigate the Jerseys. Address

THE AMERICAN JERSEY CATTLE CLUB
324 W. 23d St., New York City

ST. PAUL UNION STOCKYARDS COMPANY, SOUTH ST. PAUL, MINN.

Comparison of Receipts and Shipments of Livestock for March, 1915.

Receipts							
Railroads	Cattle	Calves	Hogs	Sheep	Horses	Total	Cars
C. R. I. & P.	945	379	340	33	.....	48	
C. G. W.....	2246	644	6677	95	32	190	
C. M. & St. P.	8394	1418	26432	6244	253	743	
M. & St. L.....	4970	1091	15133	241	2	422	
C., St. P., M. & O.	6923	1016	15490	343	33	498	
C. B. & Q.....	.....	.....	335	.....	.....	5	
M. St. P. & S. S. M.	4189	1765	33161	569	99	570	
Gt. Nor.....	10956	3985	62988	9618	285	1297	
Nor. Pac.....	4874	687	29865	31694	130	659	
St. P. B. & T.....	.....	.....	.....	.....	.....	.....
Driven In.....	795x	154	1539	37	38	.....
Total.....	44292	11139	191960	48874	872	4432	
Inc. over 1914	6962	.....	68445	.....	105	869	
Decrease.....	.....	469	.....	1470	.....	.....
Jan. 1 to date	102146	24490	681097	158643	1497	13269	
Inc. over 1914	11016	.....	295481	6156	102	3453	
Decrease.....	.....	1096	.....	.....	.....	.....
Average Wts.	770	223	199	86	.....	.....
Shipments							
C. R. I. & P.	975	.....	266	.....	.....	34	
C. G. W.....	2066	42	155	1927	13	77	
C. M. & St. P...	11688	342	27006	18404	265	724	
M. & St. L.....	274	1	453	.....	21	17	
C., St. P., M. & O.	2626	400	15401	.....	64	222	
C. B. & Q.....	872	2	16144	10102	317	232	
M. St. P. & S. S. M.	1606	180	.....	11039	108	109	
Gt. Nor.....	3801	391	.....	.....	1	113	
Nor. Pac.....	2581	25	.....	.....	18	81	
St. P. B. & T.....	.....	.....	.....	.....	.....	.....
Driven Out.....	353	168	1070	222	86	.....
Total.....	26842	1554	60495	41694	893	1609	
Increase.....	4133	.....	30584	9853	205	351	
Decrease.....	.....	1982	.....	.....	.....	.....
Jan. 1 to date	55547	2647	250074	138957	1600	4586	
Increase.....	2057	.....	141364	37182	272	1241	
Decrease.....	.....	2220	.....	.....	.....	.....

gears. At the same time they permit the hitching of a two-bottom gang plow directly behind the center of draft of the machine, something which

FOR SALE. Short Horn Bull, 18 months old, Roan; weight about 1000 pounds. Good breeding. **J. M. Crawford, Wahpeton, N. D., R. 3.**

MISCELLANEOUS

WANTED. Live Foxes, Skunks, Mink and Badgers, any time. **Envilla Stock Farm, - - Cogswell, N. D.**

POTATOES go 300 bushel to acre **CORN** 60 bushels to acre in **HUBBARD COUNTY.** Rich clover and dairying lands, near beautiful lakes, good towns, schools, roads, at very low prices. Write today to **Miller Bros. Land Co., Park Rapids, Minn.**

WANTED to hear from owner of good farm for sale. Send cash price and description. **D. F. Bush, Minneapolis, Minn.**

Grimm Alfalfa Seed from a field 20 years old. Price 50 cents per pound. **Gustav T. Rasche, Westbrook, Minn.**

ALFALFA SEED DIRECT. Sample and growers price on application. **J. L. MAXSON, BUFFALO GAP, S. D.**

BARGAINS! BARGAINS! Send for free magazine 1200 bargains. Farm lands, business chances, any kind, anywhere. Our services free to buyers. **Western Sales Agency, Minneapolis, Minn.**

FOR SALE. Medium Red Clover and Primost Flax. **J. M. Crawford, R. 3, Wahpeton, N. D.**

Agents Wanted to sell our beautiful Art Pictures. They sell everywhere, in farm or city homes, at 25 cents up. Big profits. Beautiful sample, (size 16x20) and agent's terms, only 15 cents, post paid. Order at once and be the first in your territory. **The Art Shop, Dept. A, Hendrum, Minn.**

Auctioneering

COL. H. A. KINNEY


Real Estate and Registered Stock Specialist—22 years experience. Write for dates and terms. Breeder and shipper of Chester White hogs. Larger blood lines for 1915. **Milnor, - - - NORTH DAKOTA**

Wanted. Responsible representative in each county. New Combination. 12 tools in 1. Sells at sight to farmers, teamsters, contractors, etc. Weight 24 pounds. Lifts 3 tons, hoists, stretches wire, pulls posts. Many other uses. Free sample to active agents. Easy work. Big profits. One agent's profit \$45.50 in one day. Another \$1000 in Dec. 1914. We start you. Write today for Big Color Plate. Quick action secures exclusive sale. **Harrah Mfg. Co., Box M, Bloomfield, Ind.**

Young Man, would you accept a tailor-made suit just for showing it to your friends? Then write **Banner Tailoring Co., Dept. 6, Chicago,** and get beautiful samples, styles and a wonderful offer.

CASH. If you want to sell your real estate or business or other property, any kind anywhere quickly for cash write us. We bring buyers and sellers together regardless of distance. Buyers located free. Established 1893. **Northwestern Business Agency, Minneapolis, Minn.**

Alfalfa Seed—Milk River Grown—Genuine Grimm pale blue blossom, 35c per pound (purity 99, Montana; 2nd grade 10c. Send 15c for sample package containing 2 oz. Montana, 2 oz. Grimm, 5 seeds Montana Yellow Blossom. **James Rannel (Grower), Harlem, Montana, R. R. 5.**



**BOOK ON
DOG DISEASES
And How to Feed**

Mailed free to any address by
the Author
H. CLAY GLOVER, V. S.
118 West 31st Street, New York

America's
Pioneer
Dog Remedies

was impossible to accomplish with a wide tractor having two drive wheels without causing side draft or running the tractor partly on the plowed land.

The mechanical features are not so important from the farmer's viewpoint, however, as its low price. The average farm already has as large an investment per acre for power as conditions will justify, and the purchase of a tractor which would not displace its money equivalent in other power would be unwise. As a tractor's working life in years is usually only about half that of a horse, it is evident that it should displace practically double its value in horses, if it displaces no other source of power. As a rule, however, the small tractor will take the place of a stationary engine for operating the various farm machines, and the difference in the cost of such a stationary engine and a small tractor is slight; so it will not always have to displace horses to any great extent to justify its purchase.

Judging by data already obtained in a study of the small, low priced farm tractor, it is safe to predict that it will soon command, on the ground of economy, a permanent place on the

average farm. The degree of success which will be attained with a tractor depends very largely on its operation and the general management of the farm work so as to utilize it to the greatest advantage. Like every machine, its value is increased by being worn out as rapidly as possible in profitable work, as the interest charges are thereby reduced, and depreciation, thru rust, etc., reduced to a minimum. The work of the farm should, therefore, be planned so as to use the tractor wherever practicable and to dispense with as many horses as possible. As the tractor will be capable of doing practically all the plowing on the average farm, the number of horses which must be kept will depend upon the amount of cultivation, etc., to be done, for which the tractor is not adapted. Where the tractor is used the cropping system should be planned to reduce this kind of work to a minimum.

NORTH DAKOTA BIRDS

Send 30 cents for 15 North Dakota Birds in natural colors, and list of 60 others. Address **North Dakota Farmer, Lisbon, N. D.**

ST. PAUL UNION STOCKYARDS COMPANY, SOUTH ST. PAUL, MINN.

Comaprison of the Origin and Disposition of Livestock for March, 1915.

Origin of Livestock Received

States	Cattle	Calves	Hogs	Sheep	Horses	Total Cars
Minnesota.....	37885	10771	116110	4813	96	3090
Wisconsin.....	71	22	575	.....	1	12
Iowa.....	147	3	278	22	32	11
Far South.....	.....	.....	.....	.....	.....	.....
So. Dakota....	1531	29	15792	184	206	277
No. Dakota...	4180	231	51245	2857	463	786
Montana.....	154	.....	2174	40998	74	206
Far West.....	.....	.....	.....	.....	.....	.....
Manitoba & NWT	206	9	5786	.....	.....	46
Far East.....	.....	.....	.....	.....	.....	.....
Returned.....	118	74	.....	.....	.....	4
Totals.....	44292	11139	191960	48874	872	4432

Disposition of Livestock

S. St. Paul P'k'rs	17599	8080	130333	9798	.....	.....
Cy & St. Butch.	438	38	1245	.....	.....	27
Outside Packers	1319	261	56047	.....	.....	538
Minnesota.....	5054	349	321	429	121	172
Wisconsin.....	3440	61	.....	114	107	134
Iowa.....	1490	46	1594	.....	1	60
Nebraska.....	.....	.....	.....	.....	.....	.....
Kans. & Mo..	433	.....	.....	.....	.....	12
So. Dakota....	5105	148	.....	.....	.....	159
No. Dakota....	7073	539	.....	1	23	199
Mont. & West	.....	.....	.....	.....	.....	.....
Far South.....	87	22	.....	.....	.....	3
Manitoba & NWT	.....	.....	.....	.....	.....	.....
Mich. & E. Can.	135	.....	.....	2606	107	24
Chicago.....	1422	14	481	38544	260	240
Ills. (ex Chicago)	527	.....	58	.....	225	29
Eastern Points	166	2	.....	.....	49	7
Serum Plants	.....	.....	749	.....	.....	.....
Returned.....	153	74	.....	.....	.....	5
Totals.....	26842	1554	60495	41694	893	1609

A TWO-FOLD USE FOR THE MANURE SPREADER

L. A. Moorhouse

Some of the implements which are found on almost every farm are used for very short periods each year. The length of service may not include more than three or four weeks. For the remaining part of the year such pieces either remain in the open, or they may be given the best of care in a first class implement shed. Where they are exposed to the weather a rapid decline in value is the result. Investigations have proven that the depreciation for the manure spreader is approximately 11.67 per cent annually. Owing to the fact that this machine is required to carry a by-product which contains more or less moisture, a part of the depreciation is undoubtedly due to the decay of the wood in the framework. If this and similar pieces could be utilized to a greater extent they should last almost as long, and in doing the additional work the yearly charge in connection with operation could be met more fully or

completely. Ordinarily the manure spreader is in use at seasons of the year when the field work is not demanding attention. While the harvest is in progress it will be found idle; hence, it is available for other work.

In districts where field roots such as mangolds, sugar beets, or turnips are grown, the manure spreader may serve as a wagon in transferring the crop from the field to the root cellar or pit. A simple adjustment will enable the operator to save considerable time, as well as the task of unloading with the aid of a shovel. The cylinder or spreader is first removed from the end of the box and a suitable end board is set in place, the latter being held by an iron bar or rod. When the load is taken to the cellar, the end board can be lifted out readily and the roots may be rolled into the trap door merely by putting on the crank which connects with the apron shaft and turning by hand until the entire lot has been discharged. It requires only a few moments to deliver the load. If the farmer does not have wagons enough to move the crop rapidly, this difficulty may be overcome by following the suggestion which has been offered.



Poultry Department



MISCELLANEOUS POULTRY SUBJECTS

About Feathers—Their Preparation For Sale

Michael K. Boyer

Goose feathers being more oily are apt to turn rancid sooner than chicken feathers. It is best to wash them well in hot water, using plenty of soap, and a cupful of ammonia to a barrel of water. Then rinse and dry.

White duck feathers sell at about 37 to 39 cents per pound; colored ones about 17 to 23 cents.

About ten ducks are required to make a pound of feathers.

The goose feathers are treated generally in this manner: After being spread in some clean, dry, airy place, they should be turned over with a fork every few days until thoroly dried. If placed in bags and well steamed they are more valuable, as the steam has a tendency to purify them, removing much of the oily odor they naturally have.

It requires about four geese to make a pound of feathers.

It is said that between five and six million pounds of feathers are annually imported into the United States.

The average life of feathers in pillows is said to be about twenty years.

It is estimated that the annual consumption of poultry feathers exceeds 15,000,000 pounds.

In the "feather foundries," ten pounds of filth and dirt are removed from every 100 pounds of feathers.

Five average-sized fowls will yield a pound of feathers.

Goose feathers range from sixty cents a pound for white, to fifty cents for mixed.

The best time to market turkey feathers is late in fall, during the winter, and early in spring.

Dry-picked turkey feathers command a better price in market than scalded one.

Poultry Terms Commonly Used

A male bird less than year old is known as a cockerel. When over a year old it is a cock.

A pullet is a female less than a year old, and when over that age it is a hen.

A sitting of eggs usually consists of thirteen, altho many poultrymen give fifteen eggs.

A broiler is a bird weighing two pounds or less, and which is six to twelve weeks old.

BEITH'S WHITE WYANDOTES

Winners at Crookston, St. Paul, Minneapolis and Fargo, N. D. Our birds are bred to lay as well as they are bred to win.

J. C. BEITH

Wheatland, - North Dakota

ROSE COMB RHODE ISLAND REDS exclusively. Hatching eggs at \$1.00 per 15, \$3.00 per 50, \$5.00 per 100. I ship day-old chicks, inquire before ordering. Mrs. Sophia Berg, Box 12 Hendrum, - - - Minnesota

EGGS FOR HATCHING from choice Silver Lace Wyandottes. \$1.50 for 15 eggs. Mrs. Thomas Brady, Lansford, N. D.

WHITE HOLLAND TURKEYS & BARRED PLYMOUTH ROCKS

Eggs for hatching from choice matings. Turkey eggs \$3.50 for nine eggs. Rock eggs, pen No. 1, \$2.50 for fifteen eggs. Pen No. 2, \$1.50. Express or parcel post prepaid. Not guaranteed by parcel post.

ROY W. JACOBS, - - WADENA, MINN.

BOURBON RED PURE BRED TURKEY TOMS, good ones, \$3.50 each. Toulouse Geese, \$4.00 per pair. Mrs. F. Spriggs, Maddock, N. D.

Breed White Wyandottes. Eggs for sale from vigorous trap-nested stock. My birds win in show room wherever exhibited. M. C. James, Valley City, N. D.

For Sale. Nice Buff Orpington Cockerels at \$1 each. Mrs. John Alexander, Edmunds, N. D.

FOR SALE. Rose Comb Rhode Island Red Cockerels at \$1.50.

MRS. HEIDLEBAUGH
Pleasant Lake : : : North Dakota

White Holland Turkeys, Toulouse Geese and Barred Rock Cockerels.

Gustav Larson : : : Northwood, N. D.

S. & R. C. White Leghorns. Blue Ribbon and Silver Cup Winners. Cockerels, \$1.50; Eggs, \$1 per 15; \$4 per 100. H. H. Hirschy, Lisbon, N. D.

S. C. R. I. Reds. High scoring cockerels. Eggs for hatching in season. Henry Mertens, Crary, N. D.

White Holland Turkeys, R. C. R. I. Reds. Stock and Eggs in season. Maurice H. Bliss, Geneseo, N. D.

EGGS FOR HATCHING, satisfaction guaranteed, Thoroughbred wide open laced, big utility, winter laying Silver Laced Wyandottes, bred for business and Indian Runner Ducks. 15 eggs \$1.50; 30 \$2.75; 50 \$4.00. Anthony Elm, : : : Lansford, N. D.

EGGS. Thoroughbred White Leghorns, Ferris strain eggs, 15 for \$1.00; 100 for \$5.00 write Geo. Freeman, - - - Pilger, Nebr.

White and Columbia Wyandottes, Light Brahmans, and S. C. White Leghorns Over 30 years a breeder. Stock and eggs for sale. MICHAEL K. BOYER, Box 27, Hamonton, New Jersey.

White Rock and Columbia Wyandottes and Buff Orpingtons. Stock and Hatching Eggs in Season. O. A. Barton, Valley City, N. D.

Plum Grove Stock and Poultry Farm
Breeder of Red Polled Cattle, R. C. White Leghorns and Buff Wyandottes. Stock and Eggs for Sale. V. E. GRANT, Prop., Cuba, N. D.

BRED TO LAY AND WIN

If you want Quality write

Enoch J. Peterson, Alexandria, Minn
Formerly Peterson Bros., Harwood, N. D.

HAUSMANN POULTRY FARM
Breeder of W. Wyandottes and S. C. W. Leghorns
Hillsboro, - North Dakota

ROSE COMB RHODE ISLAND REDS
Hatching eggs from my hardy northern-grown winter egg laying strain of Rose Comb Reds, \$1.50 per 15, \$3.50 per 50 or \$5.00 per 100. Day-old chicks at 15 cents each in lots up to 100. J. O. Berg, - - - Hendrum, Minn.

POULTRY Ducks, Geese, Turkeys, Pigeons and Dogs. We are the most extensive producers of thoroughbred poultry in the world. Our fowls have won the leading prizes at America's largest Fairs and Expositions. Breeds are reared on separate farms. Send ten cents for Color Plate Poultry Book and price list. It tells how to make money with poultry; how to build poultry houses; how to hatch and rear chicks; how and what to feed for eggs. Every fowl shipped is selected by Expert Licensed Poultry Judges.
UNITED POULTRY FARMS, BOX 31 HOPE, IND

When a chicken weighs between two and three pounds it is called a spring chicken.

A stewing chicken weighs about three pounds, and roaster four or more pounds.

A poult is a turkey in its first year.

A capon is a male bird deprived of its generative organs, for the purpose of improving the weight and delicacy of its carcass.

A poularde is a pullet deprived of the power of producing eggs, with the object of great size.

Cramming is a system of forcing feed into young fowls, either by hand or machine, so as to put on extra flesh.

By a trio is meant a male and two females.

A breeding pen is usually made up of from six to fourteen females and a male.

The male chicken is a cock, the male goose a gander, the male duck a drake, the male turkey a tom or gobbler.

The Wonderful Egg

The average length of a hen's egg is 2.27 inches, its diameter, at the broad end is 1.72 inches, and its average weight is about one-eighth of a pound.

It is claimed that the yolk of a soft-boiled egg is a good substitute for cream in coffee.

Raw eggs are also used as a tonic, and especially recommended for weak, nervous women.

The white of an egg is recommended as a burn remedy.

The white beaten to a froth with two tablespoonfuls of rosewater, is said to be excellent for inflamed eyes or eyelids.

The skin of a boiled egg, moistened and applied to a boil, it is said will in a few minutes draw off the matter and relieve the soreness.

Poultry says that the egg of the turkey is nearly as good as that of the hen, and that the goose is preferable to either for all culinary purposes. Ducks' eggs have a rich flavor, but are not as desirable to eat alone. They are, however, as good for all purposes of cookery.

Ducks and Geese

February is generally the beginning of the laying season for both ducks and geese.

The Pekin duck's average egg records are about the same as that for a hen, but she lays her entire crop in about seven months, while the hen takes about nine months. The Indian Runner duck extends its laying over a longer period.

The goose averages about thirty eggs.

Geese pair, but drakes will take care of four or more mates.

Eggs from yearling ducks hatch well, but geese must be about three years old to show strong fertility.

Ducks can be profitably bred for four years, geese can be bred for many years—for a period that seems incredible.

Ducks seldom become broody; geese are apt to become broody after laying the first litter.

The goose is a grazing bird, while the duck thrives with a limited amount of green food.

The goose like the duck has practically no crop.

The drake is easily distinguished from the duck by the curl in the tail feathers; this feature is not found on the gander.

The average weight of the goose is twice that of the duck.

The older the gander the more vicious he is apt to become during breeding season; the drake seldom shows temper, being of a more timid nature.

Geese cannot be profitably hatched and reared artificially, while incubators and brooders have revolutionized the duck business.

Value of Linseed Meal

Linseed meal contains 30.9 per cent protein, and 3 per cent fat, making it both a cheap and a nutritious ingredient for the poultry mash. It is especially valuable in the fall, or during the molting period.

Linseed meal is the residue left after flaxseed has been crushed and subjected to extreme pressure to remove the well-known linseed or painters' oil. The cake that is left is ground to fine meal, and, containing some oil and being rich in nitrogenous elements, it forms a rich and healthful food for poultry.

Fed in the fall of the year it acts as a bracing tonic, largely assisting the dropping of old feathers and growing the new. Its analysis comes near that of meat.

Being of a very fattening nature, it must not be fed too strongly. An over amount is apt to bring on cases of looseness of the bowels, especially to young stock, while properly fed it will regulate the bowels and keep the stock in a healthful condition.

It is claimed by some that a teaspoonful is a good allowance for a

hen; others say a quart of linseed is sufficient quantity to mix with half a bushel of meal and bran; and some others recommend it in the proportion of about 1 to 10—that is, one part linseed to ten parts mixture of corn-meal, wheat bran and ground oats. The writer has obtained best results by feeding it in proportion of five pounds to one hundred pounds of ground grain and meat (the meat part being 15 per cent). This is given daily, the year around, as a morning mash.

Odds and Ends

Ducklings that are marketed during May or June command the most profit. Those marketed earlier fetch a bigger price, but it costs more to produce.

The best selling months for chickens are June, July and August, but the demand for old hens is greatest, in September, Michaelmas for geese and Christmas for turkeys.

Turkey diet is considered especially beneficial to persons troubled with acidity of the stomach, a condition often caused by an excessive beef diet.

PURE BRED S. C. W. LEGHORNS
Cockerels, \$1.25 each; 6 or more \$1.00 a piece. **T. I. MARTINSON**
Christine - North Dakota

Barred Rocks

Dakota Strain - Bred to Lay and Win
BRADLEY-HAWKINS-TRUCK-ENBROD STRAINS

My birds won at **Fargo, 1915, 1st cock, 2nd and 3rd hen, 3rd pullet.**

Eggs for sale from four grand pullet and cockerel matings at from \$1.50 to \$5.00 per 15. The best matings fifteen years experience can produce. Write for free catalogue. Stock all sold for season.

PERCY BEALS

P. O. Bx. 736, - Fargo, N. Dak.
Oldest Stock in North Dakota

Buff Orpington Stock. Eggs: 15 for \$1.50.
Duroc Pigs, yearling Boar. **G. H. Johnson**,
Rt. No. 2, Evansville, Minnesota.

EGGS! EGGS!!

From thoroughbreds—Geese, Turkeys, Pekin, Rouen, Muscovy and Runner Ducks, White, Barred, Buff Plymouth Rocks, Hamburgs, Games, Black Langshans, Houdans, Orpingtons, Rhode Island Reds, White and Silver-laced Wyandottes, Partridge Cochins, Leghorns, Bantams, Pearl and White Guineas. Poultry eggs, 15 for \$1.00; also Rabbits, Hares, Fancy Pigeons. Write for free Circular. **D. L. Bruen, Platte Center, Neb.**

Wisconsin Wins In Big Hatching Contests

130 Egg Incubator
130 Chick Brooder
BOTH For
\$10 Freight Paid East of Rockies
180 Egg Incubator and Brooder \$12

Wisconsin Incubators won in 1910, 1911, 1912, 1913 and 1914 in National Hatching Contests—Thousand of machines competing. Catalog tells all about it—and why Wisconsin are winners. If ordered together—

BOTH MACHINES \$10—Freight Paid East of Rockies

Wisconsin have hot water heat, double walls, dead air space between, double glass doors, copper tanks and boilers, self-regulating. Nursery under tray. Incubator and Brooder shipped complete with thermometers, lamps, egg-testers, all set-up, ready to use when you get them. Incubators finished in natural color showing high-grade Calif. Redwood lumber we use—not painted to cover up cheap material. Send for catalog and we will send you a sample of the material, then you can compare it with the kind others use. If you will do this we know you will order a Wisconsin. Money back if not satisfied.

Wisconsin Incubator Co., Box 88 Racine, Wis.



EVERY YEAR

School and Home



Miss Ura Leader,
Ruralville, N. D.
Dear Miss Leader:

This month I am going to write you concerning some very important matters. These matters are ones which are often neglected on account of their apparent small value.

Birds, good roads and forestry seem insignificant in comparison with our immense wheat crop. They are not apt to receive the consideration that their importance warrants.

Birds are real friends of the farmer. They are far more useful than merely furnishing adornment for hats and marks for the sportsmen. Their useless destruction is wisely prohibited by law. Certainly the farmer has few better friends.

Investigators have many times determined the kinds and amounts of food consumed by different birds and find that our song birds have extensive menus. Their breakfast consists of worms, their luncheon is composed of weed seeds and their dinner is still more elaborate consisting of both weed seeds and insects. Few people realize the immense damage done by insects. Fewer still seem to realize that nature has provided a natural enemy to insects, judging by the ruthless slaughter of birds in many instances. It would be well if the school children were to learn something of the practical value of our feathered friends. It would be well, also, to instil into them a real love of these beautiful creatures.

Out here on our broad prairies we are apt to encourage or discourage the presence of birds depending upon whether or not we provide trees and protection for them. Many of our birds migrate to where there are large numbers of trees and many others are attracted by nesting places which may easily be provided. There are very few destructive birds. Usually such birds are not protected by law and certainly all birds which are protected should not be molested under any circumstance. There are two important considerations in studying birds; their economic value and their beauty.

Roads

The waste caused by poor roads in this country is enormous. It is the

proper time of the year to begin putting the roads in good shape. A little work in the spring will give marked results. The longer the work is delayed the more time and labor will be required to restore them to their present condition. Without sparsely settled farm regions it will be possible for the rural communities to provide pavements or stone highways of any kind. The farmers will have to depend upon the earth road. If a little work is done at the right time, however, the earth road is entirely satisfactory. There is nothing that will exceed the value of the use of some simple tool which will level the road and fill in the small ruts. At the same time a small amount of dirt

should be worked over to the center. Any modification of the King's road drag gives good results if properly used. The economy of good roads is easily seen when one stops to consider the draft of a wagon under good and poor conditions. A team will haul twice as much produce to market on a good road as they will on a poor road and do the work just as easily.

The work in forestry comes in naturally with the study of birds. The state is fairly well provided with trees suitable for all conditions but it will be necessary to make a wise selection in order to get the best results. There are not only a large number of trees which succeed well in this state but very many ornamental shrubs and brushes. I think it would be well in this case to write to the State Horticultural Society asking for information along this line and also get a list of the hardy trees and shrubs, methods of planting, proper method of care and other data. The tree crop might well be looked upon as one

THE odor of a non-perfumed soap reveals the quality of the soap.

The odor of a perfumed soap hides the quality of the soap.

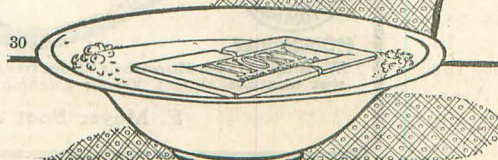
The sweet, *natural* fragrance of Ivory Soap shows that it is made of high grade materials. When you use it there is no question about quality.

There is nothing in it to conceal its true worth. It would be impossible for any soap but the mildest, purest and cleanest to give so pleasing and natural an odor.

IVORY SOAP

99 ⁴⁴/₁₀₀ % PURE

30



of value. In several instances in the state where groves have been planted for many years, measurements have been taken and it has been found that the crop of wood was of greater value at the end of twenty years than the value of the wheat crop on an equal number of acres during the same time. The growth of a forest is so rapid after the trees attain a little size that it rapidly grows into large profits. The value of the trees does not lie alone in the fact that they provide wood but also in the facts that they provide shelter for birds, serve as wind breaks, that they decrease the velocity of the wind and that they conserve moisture. Taking all in all the wood crop on the farm could be made to be a very valuable one and certainly no one should neglect this important matter. It is not necessary to mention the names of the different kinds of trees which are successful, for you, no doubt, are familiar with them at this time. If you are unfortunate enough not to be familiar with these, I advise that you get in touch with the State Horticultural Society.

I consider this to be one of the most important lessons which you will have to present to your pupils this year. Above all I would emphasize the value of trees and the value of birds.

O. O. CHURCHILL.

FLOWERS THAT WILL "MAKE GOOD" IN YOUR GARDEN

A Few Suggestions on the Ageratum, Nasturtium, Petunia, California Poppy, and Zinnia

APRIL—EIGHTH YEAR

Many people at this season of the year are considering what flowering plants they shall put in their gardens. The average housewife, who has not much time to spare on the matter, the child who is just becoming interested in growing plants, and the teacher who is laying out a school garden for the benefit of her pupils will undoubtedly welcome some simple suggestions along this line. The United States Department of Agriculture's specialist particularly recommends as satisfactory and easily-grown flowers, the ageratum, the nasturtium, the petunia, the California poppy, and the zinnia. Here are a few pointers on each of them:

Ageratum. The ageratum is one of the few blue flowers we have. In its form it somewhat resembles the heliotrope but has no odor. Ageratums grow well upon almost all soils and thru a wide range of climate. For

that reason many combinations with them are possible. For early bloom the seed should be sown in cold frames or in boxes in the house early in the season (March), but for summer and fall bloom the seeds may be sown in April or early in May in well-prepared beds in the open. Seeds sown in August will produce good plants for winter flowering.

Nasturtium. The large seeds of the nasturtium require to be planted much deeper than the fine seeds of the petunia. Sow them in rows where the plants are to grow, placing the seeds about 6 inches apart in the row and cover them about an inch deep. When all plants are up, thin so that they stand a foot apart if the soil is rich; if rather thin, it will be as well to allow them to stand at the planting distance. The plants should be given clean cultivation to induce rapid growth. If planted in the open at the same time that beans are planted, very satisfactory results will follow. For earlier bloom plant in advance of this date in hotbeds, cold frames or window boxes.

Petunia. While the petunia grows readily and rapidly from seeds sown in the open about corn-planting time, earlier bloom can be secured by sowing the seed in window boxes or hotbeds and transplanting the plants once before placing them in the open. For localities north of New York the most satisfactory method of handling these plants will be to start the seeds in window boxes about April 1, and to transfer the young plants to the open when the weather permits—about the

middle of May. The seeds are very small and should not be covered with earth in the ordinary way. They should be sown on the surface and brought in contact with the earth by firming it with a board.

California poppy (*Eschscholtzia*). The *eschscholtzia* is an annual of striking character both as regards the form and color of its flowers, which are bright and rich in their tints of yellow and orange. The plants average about a foot in height, have attractive silvery foliage, and produce their large poppy-like flowers quite lavishly from early spring until frost. The seeds of *eschscholtzia* may be sown in window boxes or in hotbed in March, or in the open where the plants are to bloom as soon as the soil is in fit condition, in April or May in the latitude of New York. The plants enjoy a rich loam and should be allowed about 5 or 6 inches of space in the row. When used in beds they may be sown broadcast.

Zinnia. The zinnia is easily grown from seed sown in the open ground. When sown in April the plants will bloom abundantly and continuously thru the entire season. During the month of August zinnias are at their

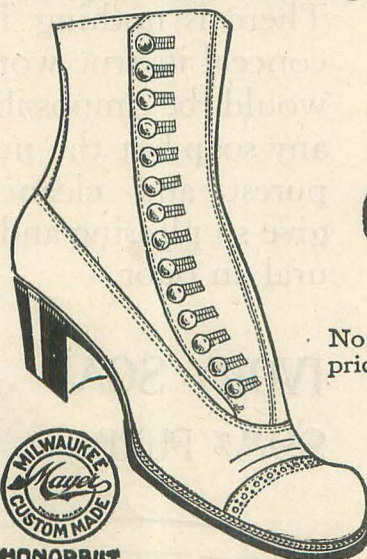
Official Denial

NO WAR TAX ON HOMESTEAD LAND IN CANADA

The report that a war tax is to be placed on Homestead lands in Western Canada having been given considerable circulation in the States, this is to advise all enquirers that no such tax has been placed, and there is no intention to place a war tax of any nature on such lands.

(Signed) W. D. SCOTT,
Supt. of Immigration.
Ottawa, Can., Mar. 15, 1915.

Style, refinement, service, comfort and wear are represented to the utmost degree in our fine shoes for ladies.



Mayer
HONORBILT
SHOES

No matter how much more than our price you are willing to pay, better material and workmanship positively can not be secured. We buy the market's best of both—try them.

WARNING—Always look for the Mayer name and trade mark on the sole. If your dealer cannot supply you, write to us.

HONORBILT

We make Mayer Honorbilt Shoes in all styles for men, women and children; Drysox, wet weather shoes; Yerma Cushion Shoes, Martha Washington Comfort Shoes.

F. Mayer Boot & Shoe Co., Milwaukee

best. To secure large flowers and a profusion of bloom the plants must be given ample room for full development, as well as an abundant supply of food. Strong, rich soils suit the zinnia. If the seeds are sown in a dwelling house or in a hotbed in March and the young plants are pricked out once or twice before being placed in their permanent situations, more satisfactory results will be secured than from outdoor-sown seeds unless equal care in thinning or transplanting is given. In addition to their use in the school garden, zinnias can be used for groups, beds, borders, garden lines, and summer hedges.

SPRING STYLES BECOMING STANDARD

The Long Tunic Appears Slashed and Abbreviated Almost to Apron Effect.

Styles for Juniors

In April, Spring tendencies begin to crystallize and we are able to surmise what will be standard and what is a mere fad and soon to die.

We now know that the Empire dress has come to stay with us for the Summer at least, and will be worn by the women whose slender, girlish figures will allow of such lines. Others will eschew this type of frock for it is essentially for the youthful figure.

The skirts are full and short, very high shoes being worn to disguise the fact that with the ordinary shoes the dress would be above the shoe-tops. For the street, the skirts are plain and full, being either gathered, or pleated, or placed on a yoke. One smart blue serge skirt was box-pleated at the top, with a slash under every other pleat thru which was drawn the patent-leather belt.

The long tunic has not disappeared, for on some of the most up-to-date suits they are worn. These tunics are so long, however, that it is but an inch or so of the underskirt that is seen beneath. Sometimes the tunic is shorter in front than in the back and the lower skirt may be of a contrasting material. Such a skirt I saw recently of black taffeta and black-and-white striped taffeta. The waist worn with this skirt was made with a black collar lined with the striped material and flaring so that the black and white formed a decided trimming feature of the waist.

Other tunics are slashed up the side and give almost an apron effect front and back. Again, the tunic shrinks to a mere apron in front, which may have rounded corners and be edged with

a narrow, fluted ruffle of the same material.

Another very pleasing style is a checked taffeta dress, which is made with the up-to-date tunic skirt. The check is in gray and black, and white with a touch of sand is used for the body of the waist and for the tunic or overskirt. The vest of the waist and the underskirt are of gray taffeta. A cunning little hat is worn with this dress, and is strictly tailored in its simplicity and extremely smart.

Suits are very smart which have a covert cloth jacket and a skirt of black covert, the connecting link between coat and skirt being a black collar on the coat.

The military effect is to be seen in linen suits. A very well-cut linen suit in oyster-white was made on Norfolk lines with a belt and very large pockets on the side over the hips. The box-pleats in the coat were duplicated in the box-pleats on the skirt, which, in this case, were pressed down to the hem. In the wool skirts the pleats are often laid in at the top, but are not pressed in.

Braid is also used to give the military effect to jackets or waists with a cut far from military. A dress with a basque-like bodice of dark blue and a plain, full skirt had four heavy braid frogs fastened directly across the front. Narrow braid outlined the lower edge of the waist. The hat worn with this dress was the crowning feature of its militarism. It was black, round and rather shallow, and worn well over the forehead. Directly in front was a cockade of gray, black and red ostrich fronds.

Callot striped and checked taffetas in the sand color and black combinations are extremely smart. One which I liked very much was made with a surplice bodice and a skirt cut bias front and back, with the sides cut on the straight of the material and pleated. A girdle of the same material was worn around the waist, ending in the back with a large up-and-down bow of the checked silk.

We have been pleased with the trim tailored lines of an up-to-date shirt waist of sand-colored chiffon and a trim black skirt. The belt, which is noticeable for the placing of its pockets, is of pique and clasps in the front with pearl button-clasps.

The separate waist and skirt are holding a strong place in the wardrobe of the woman of today. The waists are usually trim and tailored in their lines, and the skirt should be short and flaring around the lower edge, while the shoes of sand, gray, black, or tan should lace up the side instead of the front.

Large white linen or pique collars, with cuffs to match, are charming worn over the simple waist of gray or black, giving the effect of a Puritan or a Quaker costume. Gray taffeta is used for one dress, with a skirt tucked in large tucks in the back; while the front, which commences at the hips, is perfectly plain. The full waist is topped with a large unstarched linen collar, and the long, close-fitting sleeves has gauntlets to match the collar.

Some waists are made with a square or oval opening in front—something like the shape of a man's shirt bosom, only not so deep. A tucked or pleated front of white organdy, with a round collar fitting neatly over the back, is used for a chemisette in these waists.

WE WANT MEN

To devote all, or part of their time selling our HARDY MINNESOTA GROWN nursery stock. YOU CAN MAKE MONEY handling our line. IT BEATS LOAFING ALL WINTER. You perhaps make good money during the summer, but are not employed in the winter. Write us at once for information and terms.

FAIRMONT NURSERIES

Box 8 :: :: Fairmont, Minn.



BIG ASSORTMENT 50 CENTS
Prepaid. Best varieties, including guaranteed Everbearing Strawberry Plants. Valuable book free, "Win Wealth With Strawberries." Best published. Tells how to obtain guaranteed quality small fruit plants cheapest. Send address for book. BERRY'S CREST, Box 185, Clarinda, Iowa

Which Of These?

BOYS AND GIRLS, HERE IS A CHANCE TO OBTAIN YOUR CHOICE OF THE FOLLOWING FREE. IT IS EASY.

Stem-Winding Watch.....[]
Folding Lunch Box.....[]
Panama Knife.....[]
Rotary Subscription.....[]
Six-Inch Pliers.....[]
Fountain Pen (Self-Filler 14-K)...[]
Self-Sharpening Shears.....[]
Crocodile Wrench.....[]
Needle-Book (140 assortment)....[]
Sheet Music (Vocal or Instrumental)[]
Sewing Awl (For leather).....[]
Rugby Football.....[]
Catcher's Mitt.....[]
League Ball.....[]
Basket Ball.....[]
Box Kite.....[]
Roller Skates.....[]
Pathfinder Subscription.....[]

Put a cross opposite your choice.

W. G. CROCKER, LISBON, N. D.

Name.....

Address.....

Children's clothes, from the little tots to the juniors, show the simplest of lines. Linen is used again and again in blue, white, and the soft shades of rose and tan which are so smart. One dress which was worn by a twelve-year-old girl was of a soft shade of rose. A little long-sleeved bolero jacket was cut with square corners, each one embroidered with a simple design in the same color. A pleated skirt hung from a high waistline, while the daintiest of batiste blouses merely peeped from underneath the tiny jacket.

This same girl had removed a coat of Dutch blue chiffon broadcloth made with an Empire waist and pleated skirt. A wide braided belt was worn over the joining of waist and skirt, and was stitched at the top only, leaving a stand-away appearance at the lower edge. The hat worn with this coat was of sand-colored and black straw trimmed with a single band of black grosgrain ribbon about an inch and a half in width, which ended in double loops in the back which hung to the shoulders.

The party dresses for the little girls this age were made of sheer organdy or batiste. One was made with the decided Empire waist and was charming, while the other which I noted particularly was made with a waistline just below the normal. The skirt was made with double ruffles edged with lace, but the whole effect from arm-pit to bottom of skirt was very straight and up and down, and the sleeves were three-quarter length rather than short or very long.

REPORT OF LYON TOWNSHIP FARMERS' CLUB

April 9, 1915

Calling meeting to order by the president, R. H. Koves; song, "America," by the club; roll call and reading minutes of last meeting by the secretary; instrumental selection, Mr. August Smoody; recitation, "The Little Elf," by Earnest Benton; exercise, "My Friends," by the little folks; song, "Springtime," by Mrs. Burleson and Miss Hammersteadt; dialogue, "Where is My Cake," by the school; song, "Village Bells," Mrs. Maynard; recitation, "Learning to Whistle," Don Bingham; recitation, "Little Helper," Rosa Neva; instrumental selection, Mrs. August Smoody; dialogue "Jennie's Call," Anna Neva and Vieta Koves; dialogue, "A Slight Misunderstanding," Mr. and Mrs. Schlecht; instrumental selection, Mrs. August Smoody; song, "Men of Harlech," by Mr. and Mrs. Koves, Mr. Schlecht, Mrs. Ferguson and Miss Wolt; ques-

tion box discussions; song, Lyon Club Song, by all; adjournment.

After the meeting closed the members enjoyed dancing for a short time. At midnight a dainty lunch consisting of sandwiches, cake, pickles and hot coffee, was served by the supper committee. From now on our meetings will be held on Saturday night as the busy season is here and it hurries one to go during the week nights and have to get up so early and work next day. Seeding is in full sway in this part of North Dakota and the weather is very favorable.

Mrs. G. W. Maynard, Secretary.

FROM OUR EXCHANGES

A teaspoon of nitrate of soda added to three quarts of water and poured upon the roots of a Boston Fern will stimulate it to renewed life. Apply several times at intervals of about three weeks, but care should be taken not to touch the fronds.

Innumerable cases of defective sight may be traced to the evil of placing infants in carriages, with unprotected eyes turned to the sky. Let any mother who thinks this a harmless practice, thro back her own head and look upwards steadily on an overcast dull day as a test of the distress which it will produce. The white parasol, to prove of benefit rather than injury, should be supplied with a dark green lining.

To protect a hardwood floor from scratches, cut corrugated rubber to fit the bottom of chair or table legs, and fasten with strong glue. These tips are invisible and less expensive than those which are sold for this purpose.

I found my Chinaman neatly dampening the washing by means of an extra large tin salt-shaker filled with water. This distributed the required moisture so evenly, and quickly that the idea seemed well worth borrowing.

Sweet peas grow better on brush than on a trellis, in my experience. I plant the seeds in a trench at least six inches deep, covering with one inch of soil well packed down. As the shoots appear I sift earth over them again, repeating each time until the sweet peas in patience finally appear "on top." The roots seem far more thrifty when this method of planting is observed.

How many know that a pinch of baking soda in a cup of water used as a mouth wash before going to the dentist will make the teeth much less

sensitive? A successful dentist told me this, and it proved to be true, in my case.

We lost several beautiful kittens before finding out that they are subject to worms. The symptoms are lack of appetite and spirits, a hot, dry nose, a rough, staring coat, and, above all, a tendency to sit or lie hunched up, with the head down between the fore paws. Occasionally difficult breathing or a slight, dry cough will show that the worms are choking the little victim. An infallible remedy, if given in time, is the mixture of pinkroot and senna used for children with the same trouble. A good-sized kitten will take a small baby's dose, and it may be decreased for a very little one. Repeat if needed. Better give too much than too little.

How to Make Farming Pay

Agriculture

The Best Handbook for the Farm

By OSCAR H. BENSON

of the United States Department of Agriculture and

GEORGE H. BETTS

of Cornell College, Iowa

124 Photographic Illustrations, 444 Pages

THIS book shows how to raise bigger and better crops with less effort and with less expense, how to improve live-stock, how to increase the product of orchards. It teaches how to conserve resources and reclaim lands, and how to treat and cure live-stock diseases.

Everything of value known to the Government expert and taught by the Agricultural School is to be found in a nutshell within the pages of this book. It is complete, compact and practical, and its greatest value is to show the results of actual experience. It summarizes just those things that the farmer, fruit-grower and stock-raiser wants to know.

On Farm Crops, Horticulture, Soil, Farm Animals and Farm Economics, this work contains the latest and most accurate knowledge obtained by the United States Department of Agriculture and by the leading Agricultural Schools.

Price \$1.50, Postage Prepaid

Including a two-year subscription to the NORTH DAKOTA FARMER

Address

NORTH DAKOTA FARMER
Lisbon, - - North Dakota

Seasonable Receipts

Edited by Mrs. Sadie Baird.

Batter Pudding

Use one tablespoonful of flour and one-half of a cupful of milk to every egg. Steam in pudding mold three-quarters of an hour and serve hot with hard sauce. For a family of four, use five eggs.

Creamed Veal

Cut enough cold veal into fine pieces to fill two cups. Season to taste with pepper, salt, mace and add a little parsley, according to one's liking; pour over this one cupful of milk, put this on the stove and let it come to a boil and then stir in two tablespoonfuls of flour which has been previously rubbed smooth with two tablespoonfuls of butter. Serve on toast.

Rhubarb Shortcake

Rub into one heaping cupful of pastry flour that has been sifted with a teaspoonful of baking powder a pinch each of salt and sugar, one teaspoonful of lard and a small butter ball. Moisten this to the consistency of biscuit dough with sweet milk and arrange in two flat cakes, spreading well with butter, and after placing one on top of the other bake for twenty minutes in a quick oven. When the cake is done, break it apart and again butter it, spreading it thickly with a rhubarb sauce and sweetened whipped cream between and on top, dusted with finely chopped nut meats.

Queen of Puddings

To a quart of milk, allow a pint of fine bread crumbs, a tablespoon of butter, one cup of sugar and the yolks of four eggs; flavor with the grated rind of a lemon, if liked (or a teaspoon of vanilla extract), and half a teaspoon of salt. Bake in a moderate oven and spread while hot with a layer of any acid jelly or preserves; strained apple juice is sometimes used. Make a meringue of the whites of the eggs and a spoonful of powdered sugar, with or without a little lemon juice, and brown in the oven. To be eaten cold without sauce. If a meringue is not liked, three eggs, yolks and whites, may be used in the pudding, and jelly spread upon the top. This variation is good hot.

Chocolate Pudding

To a quart of milk, allow a pint of fine bread slices of bread or their equivalent in small pieces; crusts and "heels" may be used. Add three eggs, one small cup of sugar, and two squares chocolate melted, or three heaping teaspoons of cocoa, stirred dry with the sugar. Beat all together well and flavor with one teaspoon of vanilla, or one-half teaspoon of ground cinnamon, and half a teaspoon of salt. Bake in a buttered dish. Excellent hot or cold, and requires no sauce. Baked in custard cups and served cold with whipped cream. This is delicious.

Baking Powder Biscuit

Two quarts of flour, four teaspoonfuls baking powder, salt; pour in sweet cream until soft enough to drop from spoon. Bake quickly.

Graham Gems

One and a half cupful buttermilk, one egg, two tablespoonfuls of sugar, one level teaspoonful soda, butter size of an egg, pinch of salt. Stir to rather thick batter using graham flour. Drop in buttered gem tins and bake.

Rice Muffins

Two eggs, one teaspoonful butter, one-half cupful sweet milk, one teaspoonful baking-powder, one-half cupful rice, well cooked and cold, one teaspoonful salt, flour to thicken. Bake in gem pans in hot oven.

HARD-BOILED EGGS

Put them over fire in enough cold water to cover well. After they begin to boil allow fifteen or twenty minutes of not too vigorous boiling. Pour off the boiling water again cover with cold water. Remove the shells im-

mediately. The yolks will be mealy and the white hard but not tough. These can then be used in many ways either hot or cold and are a good substitute for the meat dish at this season. Here are a few ways to use them:

Cut them in halves lengthwise, arrange on a hot platter and cover them with a rich white sauce well seasoned; or slice them into a baking-dish, cover with white sauce and heat thru in the oven before sending to the table.

Slice or chop up hard-boiled eggs in the milk sauce for cream toast. This is nourishing and a very pleasant change for the plain cream toast. The same is good on heated shredded wheat biscuit or crackers.

Heat a can of salmon; pick it apart and remove all skin and bones. Spread it over the platter and slice hard-boiled eggs over it (about one for each person) pour over all a little melted butter, sprinkle with pepper and serve hot.

Besides they are always good served cold, plain, as salad or deviled.

Meat Pie

Save the gravy from a roast. Cut the meat into small pieces, add pepper, salt and one small onion minced. Add gravy and heat; cover with biscuit dough and bake 20 or 30 minutes.

"Here is the Answer;" in WEBSTER'S NEW INTERNATIONAL

THE MERRIAM WEBSTER

Every day in your talk and reading, at home, on the street car, in the office, shop and school you likely question the meaning of some new word. A friend asks: "What makes mortar harder?" You seek the location of *Loch Katrine* or the pronunciation of *Jujutsu*. What is *white coal*? This New Creation answers all kinds of questions in Language, History, Biography, Fiction, Foreign Words, Trades, Arts and Sciences, with final authority.

400,000 Words.
6000 Illustrations.
Cost \$400,000.
2700 Pages.

The only dictionary with the new divided page,—characterized as "A Stroke of Genius."

India Paper Edition:

On thin, opaque, strong, India paper. What a satisfaction to own the Merriam Webster in a form so light and so convenient to use! One half the thickness and weight of Regular Edition.

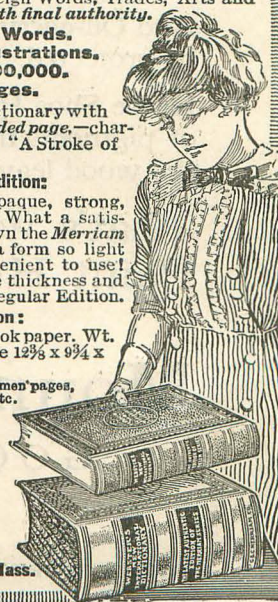
Regular Edition:

On strong book paper. Wt. 14½ lbs. Size 12¾ x 9¼ x 5 inches.

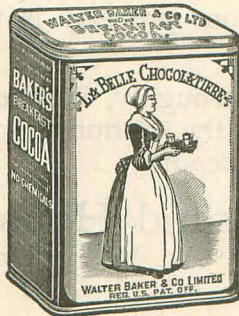
Write for specimen pages, illustrations, etc. Mention this publication and receive FREE a set of pocket maps.

G. & C.
MERRIAM
CO.,

Springfield, Mass.



Absolutely Pure and Delicious.



An ideal beverage of high
grade and great nutritive value

WALTER BAKER & CO.
LIMITED
DORCHESTER, MASS.
ESTABLISHED
1780



Why "Mound City" House Paint **HOLDS** Its Gloss

WHY do you see so many dull,
faded-looking houses?

The trouble with such houses is that they are Oil-hungry. They are painted with a paint that has not enough Linseed Oil in it—a paint that never *could* have enough Oil in it on account of the character of the pigments used.

The best Paint *must* do two things. It must preserve and beautify. Do you know that Linseed Oil is *the* great preservative in Paint and that if it were not for the sake of appearance, you could give your house a coat of pure Linseed Oil, and it would be protected?

The solid part of Paint (Strictly Pure White Lead, Strictly Pure Zinc, and, in some Paints, baser metals) acts as beautifier only.

Strictly Pure Zinc absorbs more Oil than any other pigment and that is the reason for its use in Horse Shoe Paint. WHITE LEAD is used for its covering qualities, and ZINC for its *Oil-carrying* capacity.

And Oil-carrying capacity is what your Paint *must have* if your property is to be protected.

Horse Shoe Paint, while it covers and beautifies the surface thoroughly, is made of pigments that carry so much oil, that the *first* coat satisfies the oil-hunger of the wood leaving the second coat to gloss, harden, protect, and beautify.

That's why Mound City Horse Shoe Brand House Paint **HOLDS** its gloss.

Mound City Paint & Color Co.

GOOD MAKERS OF GOOD PAINTS

St. Louis, U. S. A.

NORRIS B. GREGG, President

WM. H. GREGG, Jr., Vice-President

E. H. DYER, Secretary